



A New Cone for Root Canal Filling.

By THEO. FRHR. VON BEUST, M.D., D.D.S., Dresden, Germany.

To the many methods of filling root canals now mentioned in our dental journals, I venture to add another one. It advances neither a departure from the methods, the materials nor from the preparatory treatment of root canals now in vogue, but distinguishes itself from all other fillings that have come to my notice, in that the canal is more easily and completely filled, and in that it is removable, a property which itself must make it invaluable to every dentist. I have had opportunities of testing this filling in every respect, and can say that it can be easily and completely removed the moment the contents of the pulp chamber are exposed to the reach of an excavator or pair of light pliers. It therefore also asserts itself as a practical test filling, and can be used in the antiseptic treatment of roots.

My method is this: I take fine silver wire of from 0.05 to 0.02 millimeter in diameter, and cut from the different thicknesses of wire lengths to correspond to the different sizes of root canals. These I roughen and surround with a film of gutta percha, making the point cylindrical or cone-shaped, very like the root canal points bought at the depots. Then I turn a crook or hook at that end of the point which is to occupy the coronal portion of the pulp cavity. Thus we have an ordinary root canal point of gutta percha with a core of wire and a hook at the larger end.

To better understand the idea refer to Fig. 1, which shows the sheath of gutta percha, or the sheath may be of cotton or wax, and the wire and hook. This hook facilitates the removal of the filling, it being readily seen that the moment one can reach it with the pliers, the filling can be drawn bodily from the canal.

Removability has been the *bete noir* of most of our practitioners, and I trust that this little idea may prove of value to some of the gentlemen of the profession. It has moreover, other advantages, in that the



Fig. 1.

filling which can be made as fine as any practical guttapercha point, has such strength that it will follow the root canal to the very end without turning at the point, as is the case with the gutta percha points.

My method of filling is to introduce chloropercha into the root, and then insert the point with a pumping motion, so as to better force out all air that may be confined. The completed filling, it will thus be seen, has exactly the mechanical and therapeutic value of an ordinary gutta percha filling with the additional advantages above named.

I am well aware that Dr. Morrison and Dr. Francis Peabody, of Louisville, my dear old teacher, used metal points in connection with chloropercha, but the use of a ready-made gutta percha point, with a core of wire as here explained is, as far as I know, new.

Excessive Hemorrhage From Extraction of Third Molar.

By D. L. BOOZER, JR., D.D.S., Newberry, S. C.

On June 16 a young married woman who had been wearing a full upper denture for the past five years came to my office and stated that she had suffered the previous night with toothache in the region of the upper left third molar.

I removed the denture, and found the third molar protruding slightly from the gum, the entire crown decayed and gums exceedingly sore and spongy.

I advised immediate extraction. The operation was followed by a very profuse bleeding. The blood poured from both mouth and nostrils with such rapidity and in such volume that the situation was quite alarming.

The bleeding was soon checked, but the loss of blood had weakened the patient considerably. By the following day, the patient had regained her normal condition.

Upon examining the tooth I found the roots completely encircled by the alveolus, the jagged edges of which, lacerating the gum, had caused the excessive loss of blood.

Resection of Superior Maxilla.

By DR. WILLIAM E. TRUEN, Freehold, N. J.

Mrs. E——, age forty, entered the Monmouth Memorial Hospital on January 4, 1899, suffering from cancer in the roof of the mouth. The growth was nearly as large as a silver dollar and seemed to spring from the alveolar process of the molar teeth of left superior maxilla.

On January 6, Dr. D. M. Forman, attending surgeon to the hospital, assisted by Dr. J. S. Wooley and Dr. W. Whitman, of the hospital staff, in the presence of several invited guests, resected the superior maxilla.

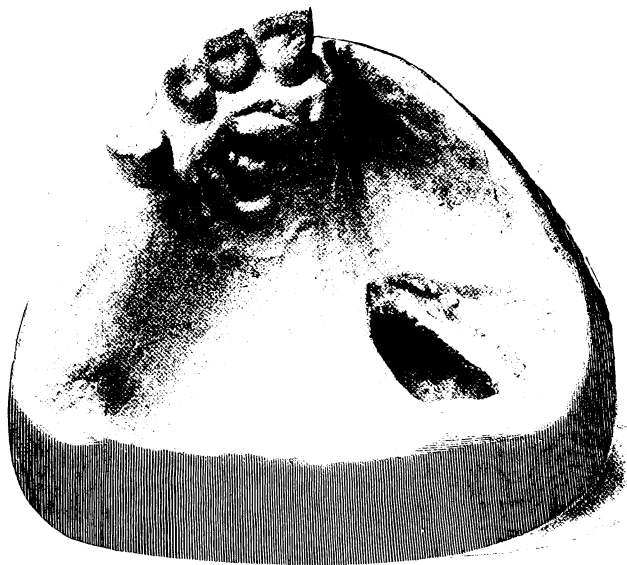


Fig. 1.

The external incisions were those of Weber's method, the bone was divided throughout by chisel and mallet and twisted out with the "lion tooth" forceps. By this method, the operation was done in less than five minutes. Hemorrhage was slight, only two vessels requiring the ligature. General oozing checked by the thermocautery and packing of the wound. The wound in cheek was accurately closed and primary union resulted throughout the entire incision. Patient left the hospital in about one week after the operation and had an uninterrupted convalescence. When seen a few

months after the operation, the scarring of the face was very slight, as the incisions had followed the natural lines and there was much less deformity, than one would naturally suppose would be the case, where the entire superior maxilla had been removed.



Fig. 2.



Fig. 3.



Fig. 4.

About one year after the operation, the patient's mouth presented the appearance as shown in Fig. 1. The space left by the removal of the bone, had been considerably filled in by granulations, leaving only a comparatively small opening into the posterior nares, and to the floor of the orbit. The patient experienced considerable difficulty in speaking, and

somewhat in deglutition, the effect in both acts being much the same as a person with cleft palate, and as there were only four teeth remaining in the upper jaw, it was necessary to make something to close the opening, restore the contour of the face, and which she could use in mastication. A plaster impression was taken in the following manner. A small piece of yellow impression wax was heated to the proper consistency for taking an impression, and then gently forced into the opening, allowing it to impinge upon the edges sufficiently to hold it in position, and left there. An impression tray was then built up with wax to fit the mouth, and the impression taken, the small piece of wax that had closed the opening coming away with the impression. Upon the model obtained from this impression was constructed the denture shown in Fig. 2.

It is held in position by two gold clasps of heavy clasp metal, one upon the bicuspid, and the other upon the central, and in addition to this is a suction chamber covering only the half of the denture that rests upon the portion of the hard palate not removed by the operation.

It will be apparent that upon the side where the resection occurred, the denture had only soft tissue to rest upon, but the heavy gold clasp on the opposite side prevents tipping to the extent that the suction in ordinary mastication is not disturbed.

Fig. 3 represents the patient without the denture, and Fig. 4 with it in position.

With the denture in the mouth there is scarcely any deformity noticed, the cheek being restored to its normal contour, and the lip raised to its natural position.

At first some little discomfort was experienced in using the appliance, but the patient soon became accustomed to it and it is now, about six months afterwards, doing very satisfactory work.

Death from Heart Failure.

By J. ELWOOD DUNN, D.D.S., Chicago, Ill.

On Thursday, June 28th, Mr. S. A. L., accompanied by a friend, Mr. H., visited my office to have the roots of two incisors extracted, but death, due to heart trouble, prevented the operation. It is for the purpose of placing the facts of this unfortunate affair on record and by so doing perhaps to aid some one who may have an experience similar to my own, that I wish to give a full history of the case.

Mr. L. called for the first time during the latter part of May to consult me regarding some bridge work which would necessitate the extraction of all three roots of the superior right first molar, as well as those of the central and lateral, and made an appointment at that time to have the extracting done.

When the day arrived Mr. L. was promptly on hand, but only to inform me that he was not feeling well and to beg to be excused until some future time. He spoke of having some heart trouble, and upon my telling him that because of that it would be best not to use an anaesthetic, he seemed particularly desirous of postponing the operation.

This visit was followed by six or seven others, each with the same result, until finally, on June 22d, he and Mr. H. called and remarked that they were ready. Before coming Mr. L. had supplied himself with a liberal quantity of whisky, and after he had resorted to it a number of times I succeeded in getting out the molar roots, but he insisted on leaving the others for a future time.

On the following Monday afternoon he called to tell me that he had been very sick ever since the previous Friday, from the liquor he had taken at that time, as he was not accustomed to so much, and asked if he could come on the Wednesday following to have the work of extracting completed. We appointed a time for Wednesday and as before he was on hand, but like the previous times, it was to beg off once more. "But," said he, "I will be on hand tomorrow sure and bring my friend again." I informed him that I would not undertake it if he came under similar conditions of the previous Friday, and he readily agreed not to take anything.

At 4.15 on the following day, June 28th, they came to my office both in the best of spirits and "ready for anything," as Mr. L. remarked. He handed his hat to Mr. H., saying "Hold that." And then stepped toward the chair, but stopped and turning to his friend, said, "Let me have my hat, I want to go to the toilet room a minute." As the toilet room is on the seventh floor and my office is on the tenth, I knew it would be some minutes before his return, so I went on with some work in the laboratory. After waiting fifteen or twenty minutes, Mr. H. began to think he had given us the slip, but we waited until the time had grown to be a half an hour. Then, at my suggestion, he went to see what was the trouble, fearing something had befallen him, which was only too true, as the poor fellow had passed swiftly, but easily, into the great unknown, according to the decision of the two physicians, Drs. McNeal and Sterl, whom I summoned hastily to his side. The next day I was called as witness at the coroner's inquest, but was informed after reaching there that my testimony would not be needed, as a post mortem had been held and a death certificate returned attributing fatty degeneration of the heart as the cause of death.

(Some years ago a man called at the office of Dr. F. T. Van Woert late in the afternoon, desiring to take gas and have a tooth removed. Dr. Van Woert declined to administer the anaesthetic in the absence of his assistant, and the man left the office, but fell dead on the sidewalk. Had the gas been administered the dentist would have been in an embarrassing predicament.—Editor.)

Dentists in the Army and Navy.

By VASSER CRENSHAW, D.D.S., Augusta, Ark.

This is a most important subject to enlisted men, and, I might also add, to the dental profession. When we take into consideration the pain that might be prevented or relieved without the extraction of the tooth containing a simple cavity, or surrounded by a mild inflammation, to say nothing of the danger to health of a suppurated tooth or lessened ability to withstand the difficult or exhaustive duties of the average private soldier, caused by his inability to properly assimilate his food, or weakened by a continual toothache, it seems a self-evident fact that the dentist is a necessity. There must possibly be a screw or wheel lost or misplaced from the governmental machinery, or something would be done, and done quickly to remedy this unfortunate condition. Unfortunate, I say, because so many teeth are sent to their untimely uselessness; unfortunate because so many could have been saved to do service for years had there been army dentists to save them, but for reasons best known to the army officers they were extracted, when a short length of time and a little travel could have saved them; unfortunate because these officers do not seem to recognize the importance of teeth in the mouth of a private soldier.

In many respects the United States Army can be said to lead the world in military science and warfare. This small army—small compared to European armies—was looked upon with ridicule by those long distance European critics who seem to think that strength simply lies in numbers, while they were almost thunderstruck at the operations of the American army in the late war with Spain, and looked with holy horror upon the continued successes of our little army. They be-

lieved that the "hoggish" Americans would be exterminated when they went against the well-trained and acclimated army of Spain.

We are all more or less acquainted with the severe physical examination which we are compelled to undergo in order to be permitted to enlist and fight the battles of this great republic. It does not require the mental services of an extremely intelligent person to understand the reasons for this severe enlisting examination. In almost every case, if not in every case, the more severe the examination the applicant can successfully stand the greater hardships he is able to endure after enlisting.

In this severe examination the teeth come in for their share of attention, and it is well known that an applicant with decayed teeth can scarcely hope to be successful in his examination for soldiership. This is all good—very good—as far as it goes, but like many good things it does not go far enough, and we, as dentists, should see that it goes farther, for it cannot do any harm, but will do an inestimable amount of good.

When a soldier is sick or unable to perform his duties, he is sent or carried, if he is unable to go himself, to the hospital, and there receives necessary nursing and the best medical services as long as they are needed. This is good, and shows the care that is given our sick soldiers. If his only trouble is the toothache, he gets along as best he can, knowing full well that he ought to be under the temporary care of a good dentist, and also recognizing that under the circumstances his only relief is in the extraction of a comparatively good tooth. In many cases a very small cavity causes the pain which, if he were out of the army, or near an army dentist, could be properly treated and filled, and which would be preserved for many years necessary service; but there being no army dentist, and also being unable to go to a dentist, an otherwise good and useful tooth is sacrificed.

There are several reasons why a private in the ranks must or will sacrifice a useful member of his organs of mastication, several of which will be found below. Distance between the enlisted man and a reputable dentist; time that would be required for him to be absent from his post of duty; inconvenience of getting permission from his superior; the meagre salary allowed him by his government. Any or all of these may prevent him from making the necessary visit to a dentist. This, indeed, seems to be an unjust advantage his country is taking of him. When we consider what the soldiers may be called upon to do, and the hardships they will be expected to undergo in obeying the cast-iron laws of the army, it does seem strange that the government should neglect

its duty in this respect and refuse to use any means by which this unfortunate condition could be removed, but possibly these things are not considered important.

**The Case
of a
Soldier.**

To better illustrate the object of my paper, I will give the following from private practice: Shortly after the close of our late war with Spain, Mr. S., a former soldier in the United States Army, duly and honorably mustered out of the military

service of his country, and going to his people, came to my office, and requested that I would examine his teeth, as one had been giving him a little trouble for several days. After a thorough examination, I found only three small cavities, in addition to the one that had been troubling him, though it had not yet exposed the pulp. Putting every tooth in good condition for future use, I requested him to give me the history of one he had lost. This loss in a mouth where the other teeth were so far from needful extraction, naturally made me believe that something had gone wrong.





Report of the Foreign Relations Committee of the National Association of Dental Faculties.

(Reported and Adopted at Old Point Comfort, Va., July 14, 1900. *)

During the past year the work of the Foreign Relations Committee has been materially extended. Advisory boards in most foreign countries have been provided for, and appointments made to fill them as fast as sufficiently definite information to enable the committee to do this properly could be obtained. Pamphlets containing an exposition of the work and the aims of the National Association of Dental Faculties have been printed and circulated in foreign countries, and a number of circulars of information for members of our foreign advisory boards have been printed and mailed to them. In addition, as directed by the association at its last meeting, a pamphlet containing digests of the reports made at that meeting has been printed and mailed to each member of the association, and to other interested members of the profession in America and abroad.

All this has involved considerable expense for printing and postage, but we believe that it has been a wise expenditure of money, as by its means the dental profession of the world has been made aware of the existence of an association of the regular and recognized dental schools of America which is devoted to the advancement of the cause of dental education and to the elevation of the status of dentistry among all nations.

Fraudulent Diplomas.

It is unfortunately the fact that, because of the lack of uniformity in the educational systems of the different States, and the absence of any general supervisory authority on the part of the National Government, under some unwise local legislation it has been possible for irresponsible, unqualified, and unscrupulous men to secure charters for institutions empowered to grant degrees, and under such authority to

*Copy supplied by courtesy of the *Dental Cosmos*.

issue, for a consideration, irregular and fraudulent diplomas. This traffic has principally been with men in foreign countries, who, primarily the guilty ones, have sought to obtain academic honors without the labor necessary honestly to acquire them. As these institutions have been conducted under pretentious names, it was formerly impossible for foreigners who had no intimate acquaintance with American educational affairs to distinguish between the regular and the irregular schools. The organization of this association has established a criterion by which they may be judged, only those owning allegiance to the National Association of Dental Faculties being recognized.

It is unfortunate that the professional situation in America has not in past years been better comprehended in Europe. All our schools have been held responsible for the vile work of the fraudulent ones—nominally located in this country, but chiefly supported by unprofessional men from abroad. There has even been a grave misapprehension of the objects of this association, and the work of the Foreign Relations Committee has in some instances been totally misconstrued. All of us are aware that while some of the very best and ablest American representatives have located in foreign countries, and to whose professional career we can point with pride, it is unfortunately the case that some Americans of a different professional reputation have gone abroad and have indulged in practices as offensive to our foreign *confrères* as they are to reputable American practitioners. There are many more unworthy foreigners who have legitimately or illegitimately become possessed of an American degree, and who, without warrant of right, claim the title of "American dentist."

**Object of
Foreign Relations
Committee.**

The belief is prevalent in certain foreign professional circles that it is the aim of the National Association and its Foreign Relations Committee to obtain for all such persons professional recognition, and to demand the acceptance of their American degree by the governments of foreign countries. It is but proper that we should in the most authoritative manner deny any aspirations of the kind. This association has not in the remotest manner contemplated any interference with or protest against the laws or regulations governing the practice of dentistry in any foreign country. It has not primarily been the object of either the National Association or its Foreign Relations Committee to attempt to secure for the American dental degree any legal recognition as a qualification for foreign practice. It is not usual in the American States which have legal professional regulations to receive the diplomas of any foreign professional school as a qualification for practice, and we cannot consistently ask that which we refuse to others.

It seems but proper that we should publicly avow the reasons that have prompted the better colleges to form this association of schools, and to appoint a committee charged with the duty of harmonizing our relations with the dental profession in other lands. We seek for the distinctive American dental diploma nothing more than the consideration which its merits demand. If its reputation has been debased by the circulation of counterfeit diplomas, it is something for which we are in no way responsible. In the formative educational period, when dental schools existed nowhere save in America, and when even dentistry itself was undefined, empirical, tentative, with no distinctive line of practice and no clearly prescribed curriculum of study, the newly adopted degree may have been conferred in some instances on insufficient acquirements. The experiment of establishing a special dental educational course of study, and thus laying the foundation for the broad profession which exists in all civilized countries today, was first tried in America, and here tested for the whole world. There were no precedents for our guidance, and no earlier successes or failures to stand as landmarks. We were the absolute pioneers, and it would be little wonder if we made some errors.

Since that day other countries have drawn professional lines, and marked out, each for itself, a distinctive course of procedure. Each of these somewhat varies from the others, and perhaps all from that originally established in America. If dentistry is to be accepted as a profession at all, or as a distinct branch of a great mother profession, it must be broader than is any state; it cannot be confined by any bourne, nor limited by mountains, rivers or oceans. There should be no American, English, German or French dental profession, except as each is a part of one undivided whole. Realizing all this, the National Association of Dental Faculties was organized for, and has been constantly laboring to attain, these definite purposes:

First.—To establish a broad and generally accepted curriculum of dental study, and by the combination of all the better dental schools of America to bring each up to a uniform standard of excellence.

Second.—To establish a clear line of demarcation between the regular and the irregular schools, and to force out of existence the latter.

Third.—Gradually to raise the standard of preliminary education until none but such as have the general erudition that should distinguish a professional man can be accepted in American dental colleges.

These were the principal objects in view, and in the attainment of them success has been secured exceeding the most sanguine expectations of the founders of the movement.

In the development of its plans the association met with many ob-

stacles, and found itself laboring under great embarrassments. One of the chief of these was the lack of information concerning professional affairs in foreign countries. The association decided, so far as was in its power, to co-operate with the worthy dentists of other countries in the laying down of certain broad principles which must be the foundation upon which any true professional practice could rest. Any international co-operation must be based upon a complete knowledge by each of the methods and aims of the others. There can be no concurrent effort without mutual comprehension and intelligence.

Another perplexity was found in the fact that in establishing the preliminary qualifications for matriculation in American colleges there was no rule by which to judge of the value of certificates presented by foreign students. After completing the course of some foreign school, a student, who perhaps spoke only a strange language, sometimes desired to conclude his studies by taking as much of the American course as would enable him to finish it, and he demanded of some American college advanced standing of one or more years. His certificates were in a foreign tongue, and in some instances were found either forged or not that which they were represented to be.

In this emergency, at the earnest request of certain American dentists practicing in foreign countries, who had been scandalized by the acceptance in America of students with improper certificates, a committee, to be called the "Committee on Foreign Relations," was appointed, and was charged with certain definite duties:

First.—It was to be in all things subordinate and subservient to the National Association of Dental Faculties, to which body it must make a full report each year.

Second.—It was empowered to appoint advisory boards of not more than three members in each foreign country having any professional relations with America, whose reports concerning foreign qualifications might form a basis for action in this country.

Third.—It was to have jurisdiction in all foreign educational questions affecting American dental colleges.

Fourth.—It was to obtain definite information concerning dental regulations and laws in foreign countries; to learn what were the curriculum and requirements of all foreign dental schools, with the view of determining what value should, under American laws and regulations, be given their certificates of study, either as a qualification for dental practice in America or for admission to advanced standing in American dental colleges.

Fifth.—It was charged with the duty of ferreting out institutions

engaged in the granting of irregular degrees or degrees irregularly, and instituting measures for their suppression.

In compliance with the first enumerated duty,
Work Accomplished your committee makes this report of what it has done
During during the past year, and appends the recommenda-
the Year. tions for future action which its experience leads it to
believe advisable. It has earnestly striven to carry
out what its members believed to be the wishes of this association, and it
has had no policy of its own to inaugurate or attempt to enforce. It has
in all things been governed by what it believed to be the spirit of its in-
structions.

Concerning the second business with which it was charged, your committee begs to report that it has divided the various countries of both the Eastern and Western Hemispheres into convenient groups, and has appointed boards for each, so far as the information obtainable has warranted. In making such appointments it has deemed the following qualifications essential:

First.—The appointee should be a regular and reputable dentist, possessing the legal qualifications of the country which he represents.

Second.—He must be a graduate of some reputable American dental school, or possess an acquaintance with the curricula of American schools, and be familiar with American dental professional methods. The list of such appointments is appended for the approval of this association.

In the discharge of the third duty imposed upon us your committee has met with great embarrassments. At the very outset colleges, members of this association, appealed to us to know what consideration should be given to certificates showing that proposed students had taken the full course in schools located in Japan and Mexico, which purported to teach the whole dental curriculum. Your committee could not learn that any schools giving a course in dentistry that could be accepted as an equivalent for any part of that demanded by this association existed in either country. They therefore ruled that students from either could only be accepted as members of the freshman class of American dental colleges, and only then if they complied with the rules of the association so far as preliminary education and a knowledge of the English language are concerned. This ruling was cheerfully accepted by the schools that had raised the question, and we present it as an encouraging proof of the loyalty and anxious desire for a high standard that exists among the recognized dental colleges of America.

But the discussion of this raised the question of the consideration that should be given to the certificates of study from any foreign dental

school. Our rules provide that no credit shall be given to certificates from any American dental school whose curriculum and regulations have not received the formal approval of this association. Could we in the name of the National Association of Dental Faculties, approve the giving of advanced standing to students from the schools of other countries that had not the same stamp of regularity? That is, could we extend to foreign and unknown dental teaching institutions privileges that were positively forbidden to American schools? And yet the responsibility of deciding this question had been thrust upon us by this association, and we could not evade the obligation. It took but a short time to arrive at the inevitable conclusion that we could not approve the giving of advanced standing to graduates or undergraduates of any foreign dental school whatever until such school had received the formal indorsement of this body.

Fortunately, few of these questions arose in time to affect any student for the term of 1899-1900. We informed the colleges presenting the cases that the matter would be referred to this annual meeting, and the committee is prepared to offer certain recommendations for the recognition of foreign schools, based upon such knowledge as we have been able to obtain. The whole matter is referred to this body for final adjustment.

In the discharge of the fourth duty that devolved upon us, your committee is in possession of a very voluminous mass of correspondence and reports, which it has earnestly labored to reduce to some system. The advisory boards appointed have, in a considerable number of instances, forwarded as full information concerning dental schools and the regulations governing dental practice in the countries represented by them as could be obtained, and it is upon such reports that the recommendations of your committee are wholly based. How much of them shall be given to the profession of America by publication must be decided by the association. It would be quite impossible to print the great mass of correspondence unless a large volume should be devoted to that purpose.

**Suppressing
Fraudulent
Diplomas.**

Under the fifth head, your committee begs leave to report that a great deal has been accomplished. The same legal counsel employed last year has been retained, and the same general course has been pursued. It is probable that more fraudulent diplomas

have been sold in foreign countries during the past year than ever before. This is due to the fact that those who have been carrying on the traffic realize that, because of activity in their prosecution, the time for accountability is near at hand, and they are striving to make the most of the present opportunity.

It is urged by foreigners that this business should be summarily stopped. Such people little know the difficulties in the way. In the first place, the traffic is mostly with foreigners. As their illegitimate diplomas are wholly worthless in this country, no State Board of Examiners recognizing them in any way, those who are engaged in the business carefully cover their tracks, and no responsible man can be located. Attempts to entrap them by decoy letters have failed, some such having crossed the ocean a number of times without delivery, being forwarded from one of their foreign agents through whom the nefarious business is carried on to another, until finally returned to the writer by the post-office authorities. Fictitious names are signed to the pretended diplomas, so that it has been found almost impossible to fix the guilt upon any person. Our friends in foreign countries have contented themselves with bitter reproaches against American colleges generally, without forwarding any testimony that would assist in the discovery of the guilty ones. The fraudulent institutions could not by foreigners be distinguished from the regular colleges, for they were in possession of charters regularly granted under a vicious law of the State of Illinois, whose entire repeal it had been found impossible to secure, because the interests of legitimate enterprises were inextricably bound up with the illegitimate ones.

Your committee early discovered that working alone it could accomplish little. The Board of Health of the State of Illinois was taking the matter up, and they possessed advantages for the prosecution of the lawbreakers which were not within our reach. We have therefore contented ourselves with co-operating with that board in every way possible, and our counsel has been instructed to offer them any assistance within our power. As a consequence we have great pleasure in reporting that, acting under the United States law, which forbids the use of the mails for fraudulent purposes, the worst of these offenders have finally been apprehended and committed to jail in default of the heavy bail that was demanded. What is of more importance, if possible, the United States mails are closed against the transmission of their correspondence, and letters to or from them are promptly sequestered.

The greatest offender was last year named in this report as "The Independent Medical College of Chicago." We secured the annulment of the charter of this affair, but in a very short time we found that the same men were yet engaged in the business under the name of "The Cosmopolitan Medical College." They had offered for sale no less than thirty-six different diplomas in all the branches of science and art, and since the forfeiture of the charter under which they first worked it is believed they have sold more than a thousand fraudulent diplomas, at

prices varying from ten to five hundred dollars each. Proof sufficient to secure the cancelation of the first charter was only obtained through the inordinate cupidity of the man who was chiefly responsible. He paid a debt of some thirty dollars due to a stable man, or hostler, by issuing a diploma to him and making him a professional man. The recipient, when he found himself under arrest for attempting to practice under it, betrayed the swindler, and we were thus able to fix his guilt.

The late proceedings against this man and his associates have developed the fact that they were in possession of no less than *twenty-four* different charters, all regularly issued under that mischievous Illinois law, which was enacted for beneficent purposes. We have now learned the methods of these men, and it is believed that it will soon be possible to put an entire stop to their villainous traffic, through the imprisonment under the United States postal laws of those engaged in it. Too much credit cannot be given the Board of Health of the State of Illinois for the active part it has taken in the suppression of these miserable pretenders that have so long been bringing discredit upon our legitimate and excellent educational institutions.

In view of the fact that the other work of the Foreign Relations Committee is more than sufficient to engage all its surplus energies, and in further consideration that the work of the suppression of the fraudulent schools is now well in hand and the path for action fully defined, your committee recommends that this work be, for the future, placed in the hands of the Committee on Law, which shall receive the same instructions as those heretofore given the Committee on Foreign Relations.

The progress that this association is making in its efforts to raise the status of professional teaching in our own country, to obtain a better appreciation of American professional affairs in foreign countries, and to maintain steady advancement toward a dental solidarity among all nations is very encouraging to every lover of humanity. It is true that even at home there may in uninformed circles yet be found some remnants of an unworthy professional jealousy, a failure to comprehend the real educational situation, and a tendency to attribute to our teachers motives unworthy any honest man. But the steady, persistent work of this association in elevating the accepted standard just as fast as prudence permits, has wrought a great change in professional sentiment and immeasurably benefited the schools, and through them the profession at large. It only remains for us to continue this good work a few years longer to produce results that will be permanent in their character, and so firmly established as henceforth to be self-sustaining.

**Report Concerning
Foreign
Equivalents.**

Your committee has very carefully considered a great mass of correspondence and many voluminous reports, and begs hereby to submit the conclusions which it has reached. It must not be forgotten that the system of dental instruction in Europe varies very widely from that of our special American dental schools. Instruction separate from that given in the medical schools or universities is very rare, and the practical training which forms a part of our curriculum is usually given by private preceptors.

Your committee does not feel at liberty to recommend the acceptance of an oral and theoretical course as the equivalent for one including practical work. We cannot believe that the certificates of private and irresponsible practitioners can by us be accepted as any part of a college course, and hence we have given them little consideration. It is quite probable that in some instances we have recommended that one year's advanced standing be given the holders of some certificates when further knowledge might show that they should be admitted to our senior classes, but we have thought it wisdom to err, if any mistakes are made, upon the safer side, as future action can readily correct any such errors.

Australia.

A very complete report from the various colonies of Australia and New Zealand has been made by the advisory board appointed for those countries. It would appear that in most of the colonies there is no dental legislation, but Victoria has lately secured a law analogous to that of England, and in Melbourne a dental school has been organized whose curriculum, from the partial syllabus furnished, seems to be a comparatively broad one. The dean of the "Australia College of Dentistry" is an American graduate, and he appears to have the confidence of the dentists of Australia.

Your committee is unable positively to determine whether the school in all respects comes up to our minimum requirements, but this it has directed its chairman definitely to ascertain, after which your committee will be prepared to recommend to this body some proper action. There has also been established in Melbourne, Province of Victoria, the "Dental College and Oral Hospital of Victoria," but your committee is not at the present time in possession of sufficiently definite information to enable it to offer any recommendation concerning it.

In the provinces of Western Australia and Tasmania no dental legislation has been secured.

There is a dental law in New Zealand, and the member of the advisory board from that province has furnished your committee with an abstract of it. There are no dental schools in the province.

Switzerland. Full reports from this country have been furnished by Dr. Bryan. It is a republic analogous to our own country in some respects, the federal union being composed of separate cantons. There are some excellent universities which offer certain facilities for dental study, but their practical instruction, we believe, cannot be accepted as an equivalent for that offered by American dental colleges. Your committee recommends that holders of the Swiss national diploma be given one year's advanced standing in the schools of this association, but that no consideration be at present extended to holders of the cantonal qualifications.

Spain. Complete reports have been furnished by members of the advisory board. The Spanish requirements in medicine are very high, but your committee cannot learn that there are any dental schools, or dental departments of universities, whose course of instruction can be accepted as the full equivalent for the instruction given in American dental colleges.

France. Your committee is aware that separate dental schools exist in France, and its chairman has been in daily expectation of receiving their curriculum of study, but up to this time has been disappointed. Without this exact knowledge the members do not feel themselves justified in recommending any action, for we cannot proceed in so grave a matter upon mere assertions or impressions. As members of your committee will visit France in the immediate future, and will carefully investigate the course of study, we ask that we be given authority to incorporate our recommendations in this report after such investigation shall have been completed.

Germany and Austria. The dental schools of these countries are departments of the universities, and only university students attend them. The instruction consists of lectures and clinical work given by from one to three dental professors, who lecture upon the different dental subjects. Instruction in chemistry and allied studies is afforded in the School of Philosophy or Science; in anatomy, physiology, etc., in the School of Medicine. No special instruction is given dental students except by the very few dental teachers. The clinical instruction is largely devoted to extraction and oral surgery. The practical work is usually quite limited. There is no obligatory course, but students enter for such lectures as they may choose, paying the fees of each professor separately. There are no obligatory hours for study or lectures.

The mechanical instruction consists of lectures on the principles of mechanics, the practical work being usually done in private laboratories. The examinations have very little resemblance to ours, each

teacher asking three questions out of a list of forty approved by government. They are not usually as exhaustive or comprehensive or scrutinizing as ours. The licensing or approving power rests with the "Kultus Ministerium," or department of religion and education. The great majority of dentists in practice are Zahntechnichers—mechanical dentists—upon whose work no restrictions are placed, as they are not recognized by the government.

Your committee recommends that students speaking the English language, who have taken the full dental course in German or Austrian universities, be eligible for reception in the junior classes of American dental colleges, provided it be shown that they have had at least two semesters of competent college instruction in practical laboratory and operative work. It further recommends that students speaking the English language who have had at least four semesters of such instruction in operative and prosthetic practical courses, and who shall have finished the dental course in the University of Berlin, or in any German or Austrian dental school whose course of instruction offers a full equivalent, be eligible for admission to the senior classes of accepted American dental colleges.

Italy. In Italy the practice of dentistry was long without special restrictions. Then an attendance upon lectures in a medical school was required, and a dental diploma was issued. In 1892 a law was passed which required dentists to obtain a medical diploma. This was not enforced until 1898, when a movement against foreign practitioners was inaugurated. They appealed to the courts and carried the matter to the Supreme Court, which decided that those in practice previous to 1888 had rights which could not be abrogated. At present the law of 1892 is in force, and this requires a medical diploma for the practice of dentistry and phlebotomy.

There are, we believe, no schools in Italy which have courses that can be accepted as equivalent to those of our American dental schools. The instruction given in the medical schools your committee believes to be too exclusively general in its character to form an acceptable course in dentistry for American students.

Mexico. There is a medical school in the City of Mexico which purports to give dental instruction. Your committee cannot learn that it is of such a character as will enable it to be accepted as the equivalent for a course in an American college.

Japan. There is one dental school in Japan—that of Dr. Takayama, in Tokio. It confers no degree, but gives a certificate which entitles the holder to govern-

ment examination, the same as if he had studied with some practicing dentist. As the instruction is personal and the school is quite irresponsible, your committee believes that no consideration can be given to it.

In these countries the title of dentist is obtained
Holland and Belgium. by passing a practical examination in the theory and practice of dentistry. There are no separate dental schools, and we are not sufficiently informed of the comprehensiveness of the syllabi of the universities to offer any recommendations concerning them.

There can be no questioning the fact that Eng-
Great Britain. land has some excellent dental schools. The only embarrassing circumstance in the determination of their status relative to ours lies in the great difference between the educational systems of the two countries. Undoubtedly they place greater stress upon preliminary educational requirements than do we, but your committee is of the opinion that our practical instruction is superior. Originally, we believe, there was little instruction given in prosthetic work during the term of attendance upon hospital lectures. Students were supposed to come to the college for didactic instruction, the practical part having been previously communicated by a preceptor. It should be comprehended that English dentists frequently employ a mechanic, who is not required to possess any special educational qualifications, the registered dentist mainly confining his attention to the operations of the surgery or operating room.

In this country we believe the practical work of the laboratory should form a part of the college course, and we do not graduate a student until he shall have satisfactorily completed the whole curriculum within the college walls. We are under the impression that the English system is undergoing a change in this respect, and that practical laboratory work will soon form a part of the obligatory college course. We recommend that all students who shall have finished the complete course in any recognized English, Irish or Scotch dental school or hospital shall be eligible for reception as senior students in American dental colleges upon proof of their having taken as a part of such course two years of instruction in a properly equipped dental laboratory and dental infirmary connected or affiliated with such dental school or hospital, and which requires the successful completion of the work deemed essential by recognized American schools, as formulated in the minimum requirements for foreign dental schools accompanying this report. We further recommend that for the present no consideration be given to partial courses in any of the dental schools of Great Britain.

Sweden.

Very complete reports have been furnished by the chairman of the advisory board, Dr. Förberg.

The country has one dental school, which is the dental department of the "Carolina Medico-Chirurgical Institute of Stockholm." Instruction is given by five professors of the medical department, and there are three dental professors, occupying respectively the chairs of dental surgery, operative dentistry and dental prosthetics and orthodontia. From the assurances given by Dr. Förberg, your committee believes that its graduates should be permitted to enter the second-year class of recognized American dental colleges, provided they shall have complied with our requirements concerning mechanical laboratory work.

Your committee has not sufficient knowledge concerning this school to warrant further recommendations at present.

In the Dominion of Canada there is but one school which demands consideration, and that is a member of this body. Yet the educational systems of the two countries, especially in professional matters, are so different as to engender continual embarrassments. Canada being a foreign country, your committee has felt itself bound in duty to place it in the list of those countries whose relations with us must be taken into consideration. The dental educational system of Ontario approaches more nearly that of England than that of America. It has an analogous system of indentures which the dental student must sign, and private preceptorship forms a portion of its obligatory instruction.

This is directly at variance with our system, which accepts no tutorship by irresponsible parties. The dental law of Ontario forbids the entrance upon practice of any one who has not taken his final course of instruction in the Royal College of Dental Surgeons of Ontario. We believe that this principle is the correct one, and that the same rule should be made applicable in the United States, and that here, as there, no foreign qualification should be sufficient for registration in the various States of America. But the membership of this foreign school in our association presents an embarrassment which for the present seems insuperable, and your committee therefore has no recommendation to make, but leaves the matter for future consideration in the hope that some code of international agreement may be devised which will give to the graduates of America's recognized colleges who desire to practice in Canada the same privileges extended to the alumni of the excellent Ontario Dental College.

Concerning other foreign countries, your committee is not in possession of sufficiently definite information to warrant any action whatever. We have no knowledge of the existence of any courses of instruction which can be accepted as an equivalent for courses in the institutions having membership in this body, and therefore advanced

standing in our schools cannot in justice to our own students be granted, save in the instances above enumerated. The committee will gladly make use of any further information which may be furnished them, and will, in the furtherance of the duty with which they are charged by this association, embody such knowledge in future reports.

Report Concerning the Minimum Requirements to Be Demanded by the National Association of Dental Faculties for the Recognition of Foreign Dental Schools Whose Students Desire Advanced Standing in the Colleges Belonging to the Association.

1. The college must require of matriculants a preliminary education which is the full equivalent of that demanded by the school of this association.

2. The college must demand of students full attendance upon at least three full annual courses (not semesters) of lectures of not less than seven calendar months each, in separate years, covering all the studies proper to a full dental curriculum.

3. The college must possess a bacteriological laboratory, with sufficient of equipment for instruction in a competent course in bacteriology, which must form a part of its curriculum of study.

4. The same must be required in chemistry, histology and pathology.

5. There must be a technic laboratory in which shall be taught the proper manipulations for the insertion of all kinds of fillings for teeth, the preparation and filling of the roots of teeth, the tempering and shaping of instruments, the drawing of wire and tubing for cases in orthodontia, and the cutting of bolts and nuts.

6. There must be prosthetic laboratories sufficiently equipped for teaching all kinds of prosthetic work, and the construction of all the approved prosthetic appliances.

7. There must be a sufficiently equipped laboratory for instruction in making crowns and bridges, and the construction of appliances used in orthodontia.

8. There must be a properly equipped infirmary or surgery for the reception of patients, upon whom each and every student shall be required individually to perform all and enough of the operations necessary in dental practice thoroughly to qualify him for the successful pursuance of his profession.

9. Complete records of the work done by each student, of his attainments at sufficient and full examination in each subject of the curriculum of study, of his attendance and deportment during the course, must be permanently kept.

10. No credit must be allowed for any work not done under the

immediate supervision of instructors connected with or especially approved by the college, and who are in direct affiliation with the faculty.

The following is a list of the countries for which advisory boards have been designated, and the appointments and nominations so far as made:

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" "	B. J. Bonnell.	94 Cornwall Gardens, So. Kensington, London.
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" "	C. Van der Hoeven, D. D. S.	Der Haag.
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" "	S. S. Andersen, D.D.S.	Univ. Pennsylvania.	Christiania, Norway.
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"	Geo. Th. Berger, D.D.S.	Phil. Dental Col. '77.	St. Petersburg, Russia.
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"	Friedrich Hesse, D.D.S.	N. Y. College Dent.	Goethe Str. 6, Leipzig, Germany.
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" "	Dr. Waeisser.
" "	Dr. Arkövy.
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" "	A. V. Elliott, D.D.S.	Univ. of Mich. '87.	10 Via Tornabuoni, Florence, Italy.
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" "	Theo. Frick, D.D.S.	Univ. Pennsylvania.	14 Tonhallenstrasse, Zurich, Switzerland.
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" " "	J. Ward Hall, D.D.S.	Shanghai, China.
" " "
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" "	Herbert Cox, D.D.S.	Univ. of Michigan.	216 Queen St., Auckland, New Zealand.

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" " "			
Mexico & C. America.			
" " "			
Ven., Colom. & Ecua'r			
" " "			
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Foreign Relations Committee.



Non-Cohesive Gold.

By H. B. TILESTON, D.D.S., Louisville, Ky.

Read before the New Jersey State Dental Society, Asbury Park, July, 1900.

Had I expected to present something entirely new before this renowned society, I would not have chosen the subject of non-cohesive gold, which is so old as to be considered by very many in our profession as antiquated and somewhat out of date.

While the use of non-cohesive gold as a filling material is venerable, it is by no means out of date, and I shall offer no apology for presenting a paper upon a material which has been relegated to unmerited oblivion by a very large number, particularly of the younger men, in the practice of dentistry. It has been said that "he who causes a tree to grow or even a blade of grass where none grew before, is a benefactor of his fellowman," and if I can, by means of a fair presentation of its merits, bring any one member of our profession to employ non-cohesive gold in his practice, never having used it before, I shall have written to a purpose quite satisfactory to myself.

The query very naturally arises, that if this material so long known, possesses such eminently valuable properties, why has it fallen into such general desuetude? I reply that it is chiefly because of the methods of instruction almost universally employed in our colleges. For reasons best understood and appreciated by those engaged in teaching operative methods, it has been found to be inexpedient to teach the use of non-cohesive gold in the college clinic. I do not think its employment presents any more difficulties than that of cohesive gold; on the contrary I contend that it is much the easier and certainly the more expeditious method of the two. But the technics in the use of these two forms of gold differ widely. The filling of a cavity in a tooth with cohesive gold demands the most careful and accurate attention to every minute detail from beginning to end; each particular piece must be placed where it is intended it shall remain immovable, and its condensation effected at once, while the adaptation to the walls of cavities requires a precision of manipulation and an intensity of application on the part of the operator, of which but few, I believe, are capable.

For these reasons the teaching of the use of cohesive gold affords splendid manual training for the student, and a cultivation of that precision of technique which is so essential to the successful practice of dentistry.

The student should be instructed, however, in the use of non-cohesive foil *after* he has become well practiced in the use of cohesive, and it is my custom as a teacher of operative dentistry to give such instruction towards the close of the term by a series of special lectures and through clinical demonstration.

One who has become proficient and skilful in the use of cohesive gold will very rapidly acquire the methods employed in working non-cohesive, but it is not so easy for one trained to the use of the latter material to successfully manipulate the former.

There is something apparently careless and slovenly in the use of non-cohesive gold, but only apparently so, for the skilled operator has a definite purpose in his method, applicable only, however, to non-cohesive gold which, if attempted to be applied to cohesive would be disastrous.

Definition of Non-Cohesive Gold.	It is well to make definitely plain at the outset just what is meant by non-cohesive gold. Every maker of foil has on the market what he calls "soft foil," and this is accepted by probably a large majority of operators as non-cohesive gold; but most of it is distinctly cohesive before it has been annealed. The property of cohesion is more fully developed, it is true, when the foil is heated to redness, but when the field of operation is kept perfectly dry, the mere abrading of the surface of the unannealed foil by serrated pluggers is quite sufficient to develop cohesion enough to make contouring possible.
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This is due to the method of preparation employed by the manufacturer. The power of metals to occlude gases upon their surfaces and the manner in which this property is taken advantage of in causing ammonia gas to condense upon the surface of foil to destroy its cohesive tendency, is so well known that I need only refer to it here. The fact must be borne in mind that cohesion or the tendency to weld cold is an inherent property of *pure* gold. The difficulty is not in the preparation of gold that will weld, great purity being the only requisite in that case, but it is in the preparation of gold that will not weld and yet be free from impurities in the nature of alloy, that would render the product harsh and intractable. The thin film of ammonia gas condensed upon the surface of pure gold foil to make it non-cohesive is so very volatile as to be readily dissipated by even a slight rise in temperature, and is so exceedingly attenuated that it is undoubtedly displaced, partially at least, by the friction of one layer upon another, and very certainly by the contact of sharp-pointed or even serrated pluggers. I do not mean to say that the cohesion thus accidentally induced is sufficient to be depended upon when we *desire* to weld one piece to another; but I do mean to

say that if our aim is to avoid the slightest disposition on the part of our gold to cohere, then the accidental displacement of the protecting gaseous film in the manner indicated is quite certain to wholly defeat that purpose. I will endeavor to make this plain further on.

What I apprehend to be non-cohesive foil, is foil that will not and cannot be made to cohere under any ordinary circumstances; one piece will glide past another even when being *forced* between pieces already placed, without any tendency to stick or drag, and if a cylinder of it has been malleted against the wall of a cavity it can be taken out and unrolled again. These things cannot be done with so-called "soft foil."* The only way to make "soft foil" simulate non-cohesive in these respects is to wet it. If the proper methods are employed, non-cohesive gold can be manipulated just as well wet as dry. This proposition is aside from any consideration of aseptis. I prefer always to have the field of operation dry, but this is not possible in every case, and under such circumstances I do not hesitate to make a submarine filling with non-cohesive gold.

It is quite possible that non-cohesive gold may be made to simulate cohesive by the use of sharp (what are called needle point pluggers), which cut through the gold and thus bring pure particles of the metal in contact at the margins of the puncture and cohesion results. This explains the claim of needle point operators that they can contour with non-cohesive gold. Such cohesion, however, is not homogeneous throughout, and hence such contours are not reliable under stress.

There are but few manufacturers who make what is known as dead soft, absolutely non-cohesive gold. There is but one make that I have found to be uniformly satisfactory, and that is the foil made by Chas. Abbey & Sons. The peculiar property of non-cohesive gold which gives it superiority over cohesive or the before-mentioned "soft foil" is the extreme pliability amounting almost to plasticity even when rolled into a dense cylinder, which is imparted to the mass simply by the total absence of any tendency on the part of the folds of metal to cohere. A cylinder made by folding a leaf of the foil smoothly into a ribbon, and then rolling it quite tightly on a slender broach, can be carried towards the wall of a cavity by hand pressure or by percussion, and it will spread out over the wall and become perfectly adapted to it without any disposition to crinple back over the end of the plugger and spring away from contact with the wall. Such a cylinder made of cohesive foil would weld on the side next to the impact of the plugger and thus interpose a rigid mass between the instrument and the other two-thirds or three-

*Wherever the term "soft foil" is used it will be understood to refer to foil that becomes cohesive upon annealing.

fourths of the cylinder presenting towards the wall, and no amount of force possible to employ upon a tooth could bring it into adaptation with that wall; hence large masses of gold may be used in the non-cohesive form with certainty of adaptation and much saving of time and consequently with less tax upon the endurance of both patient and operator.

The place above all others where non-cohesive

Method of Using

Non-

Cohesive Gold.

gold is indicated is against the gingival wall in approximal cavities in bicuspid and molars. Always difficult to reach and frequently out of sight to direct vision, this wall is almost impossible to properly protect with cohesive gold. The buccal and lingual walls may be accurately filled against with cohesive gold, but they also can be much more certainly protected with non-cohesive cylinders and in a fraction of the time required for cohesive gold. For this purpose cylinders should be made in length a fifth to a third longer than the depth of the cavity from the cavo-surface angle to the axial wall and of a diameter proportioned to the bucco-lingual breadth of the cavity and the size of the orifice of access upon the occlusal surface. A cylinder should be taken up carefully and carried without mussing into the cavity and placed with its convexity laid smoothly against and into either the buccogingival or the linguogingival angle, whichever is most convenient of access, and pressed firmly into the angle against the lateral wall with the side of the foil carriers, which should be bowed out just back of the points, and quite stiff. Complete condensation is not to be attempted at this stage. Another cylinder is placed in the same manner into the opposite angle. The diameter of these two cylinders should be such that when laid in the positions indicated they will cover the buccal and lingual walls one-third to one-half way up towards the occlusal margin and almost or quite meet upon the gingival wall. Now a third cylinder is carried down between these two and impacted directly against the gingival wall with a broad plugger point, and, acting as a wedge, will force the two cylinders already placed, tightly into their respective angles. In very broad cavities two cylinders placed side by side and then forced to place may be better than one. It is just here where the wedge cylinder is forced down between those already in place, that the value of non-cohesive gold is most beautifully apparent, and it is just here that the operator who uses soft foil under false impression that it is non-cohesive, fails absolutely to secure contact with the gingival wall. The friction of the wedge piece against the bruised surface of the cylinders of soft foil between which it is forced develops cohesion enough to cause it to stick and to stop short of contact with the gingival wall, and no amount of force even with the mallet will carry it into contact

with that wall. Moreover, the adhesion to the lateral cylinders will drag them away from the buccal and lingual walls as the wedge is driven towards the gingival. The operator may force them back into contact at these points, and then they rock up at their other extremities and raise the central cylinders still further away from the gingival wall. These points of imperfect adaptation may escape the observation of the operator, but they exist nevertheless, and constitute a vital imperfection. No difficulty of this character is to be apprehended when non-cohesive gold is used, but the adaptation is assured. We now have the gingival wall and about one-half or two-thirds of the lateral walls covered with non-cohesive cylinders which are left protruding into the interproximal space until a later stage of the operation. In this class of cavities it is best to complete the operation with cohesive gold, and a start is secured by incorporating a soft pellet which has been annealed into an angle of the partially condensed non-cohesive cylinders with a sharp-pointed plugger.

If the cylinders have been much condensed, there may be experienced some difficulty in starting the cohesive gold. This may be overcome by the use of the De Trey gold, which readily welds to the non-cohesive, and to which, in turn, the ordinary gold will cohere with ease. When the cavity has been sufficiently filled to securely anchor the mass of gold, the protruding ends of the non-cohesive cylinders may be condensed towards the axial wall with a long foot plugger, so directing the force as to spread the gold towards the margins, causing it to overlap the bevel perfectly. It is frequently good practice to finish this part of the filling while the interproximal space can be readily reached, and before proceeding to build out the contour towards the occlusal. The ease with which the non-cohesive cylinders can be spread into contact with and over the margins of the walls with the foot plugger and mallet, and the burnisher, and the facility with which the excess can be cut away, will be a revelation to one who uses this kind of gold for the first time.

Not only is non-cohesive gold peculiarly applicable to the gingival third of approximal cavities in molars and bicuspid as described, but it is equally valuable in the same position in approximal cavities in incisors and cuspids. It is hardly so essential to use it in these cases, however, for the gingival wall being more accessible both to instruments and vision, it is possible with great care to secure good adaptation with cohesive gold, but with the expenditure of much more time. There are two other classes of cavities in which the employment of non-cohesive gold is of marked, and, I may say, peculiar value; namely, all simple cavities on the occlusal surfaces of molars and bicuspid, and

cavities at the gingival margin upon buccal and labial surfaces. All such cavities are filled without the use of the rubber dam, employing cotton rolls or skilfully arranged napkins, making occasional use of a clamp to assist in holding them in place, and to relieve the hand and fingers of that tiresome duty.

In filling occlusal cavities I employ cylinders rolled with moderate compactness from a ribbon whose width is about one-half greater than the depth of the cavity, and which has been folded, from a third or a half of a number four sheet of gold, the diameter of the cylinders varying with the size of the cavity, and the part of the cavity they are to fill. I use cylinders of rather excessive length for the reason that when introduced into the cavity the pressure with which they are forced against a lateral wall is directed at an angle towards the pulpal wall of about 45° , thus compressing the end of the cylinder against the floor and shortening it somewhat, so that it protrudes out of the cavity about a third of its length. Into each of the five fissured grooves is placed a cylinder of suitable diameter, which is forced firmly into the end of the groove with a wedge shaped plugger. The sharp wedge compresses the side of the cylinder, carrying the mass of gold toward the end of the fissure and at the same time invaginating it so that some of the gold lies upon either side of the point. Now with a rocking lateral movement the point acts as a lever and compresses the gold to the sides of the fissure. When the plugger is removed there is a deep crevice into which is inserted the end of a ribbon which is worked in fold by fold with firm pressure directed at the angle towards the floor, indicated above. This is continued until each groove is filled compactly to the central portion of the cavity. If now any portion of the walls is uncovered a flattened cylinder is placed against it and the center completed with ribbons of soft foil, which because of the slight cohesion developed in manipulation, is an advantage in that it gives greater hardness to the surface of the filling, and is not liable to scale off if at any point the cardinal principle to be employed in using non-cohesive gold, namely, that of incorporation by wedging, should be inadvertently slighted. When the cavity has been packed with enough gold to certainly fill it after it has been condensed, the protruding mass is compressed by vigorous hand pressure or mallet force toward the floor, so directing the pressure as to mould the gold over the margins or to any point where needed. This plasticity is a property peculiar to non-cohesive gold, and permits also the final spreading of the mass with a burnisher to more perfect adaptation to the cavity walls. The finishing is done with small stones and finishing burs.

Buccal and Labial Cavities. The most difficult cavities to successfully fill with cohesive gold are those which occur at the gingival margin upon buccal and labial surfaces, and especially when they extend more or less beneath the gum margin, as is frequently the case. The adjustment of the rubber dam in such cases is often impossible, and hence the dryness essential to the cohesion of gold cannot be secured. In this class of cavities non-cohesive gold is decidedly indicated, and its employment solves the difficulty most happily. As these cavities are generally quite shallow, the cylinder should be rather short, as long ones are liable to be tipped out in the act of wedging. A cylinder should be placed at each end of the oblong cavity (they are usually of this shape) large enough to cover the end walls entirely, and malleted with a short foot plugger tightly to place. A flattened mat is to be laid along the gingival wall and another along the occlusal wall, both large enough to cover those walls between the cylinders already placed, and the operation completed with ribbons of soft foil. The tendency will be, when using non-cohesive gold for the first time, to either have a deficiency in the mass when finally condensed, or to have a great excess, but with practice, fillings can be made which almost exactly fill the cavity and require but little dressing down after thorough burnishing.

The preparation of cavities for the reception of non-cohesive gold does not differ greatly from what is accepted as good form for cohesive gold, except that retaining pits are omitted. Opposite walls should be about parallel to each other with only enough undercut to secure retention. In approximal cavities in molars and bicuspidis the resistance form is obtained upon the occlusal surface and, of course, is to be filled with cohesive gold. In occlusal cavities all undercuts are to be avoided and overhanging walls cut boldly away.



Combination of Oxy-Phosphate with Gold and Amalgam.

By F. L. FOSHEIM, D.D.S., New York City.

Read before the New Jersey State Dental Society, July, 1900.

The combination of oxy-phosphate of zinc cement with gold or amalgam in the filling of teeth has been advocated by many and also condemned. I have used this method for about eight years with universal success and satisfaction, and have found that metal fillings inserted by the aid of the adhesive cement to last and support teeth better than would the metal alone. This is especially true in teeth of poor structure and with brittle enamel, and in large cavities when the pulp is alive and proper undercuts cannot be secured.

I have records dating back over seven years of this kind of teeth which were filled with gold or amalgam and adhesive cement, and they are doing good service to-day. These teeth had previously been filled by various dentists, but the work lasted only a short time, and when the patient came to me they were filled with cement as a last resort; so the patient had been informed.

In constructing this kind of fillings the most satisfactory results will be obtained by applying the rubber dam. The preparing of the cavities is done as usual, and I have found Dr. Black's suggestions thoroughly practical and very valuable. No retaining grooves for starting these fillings are necessary, although where possible the cavity should be wider inside than at the opening. The cement to be used ought to be fairly quick setting and of a very adhesive quality; thorough mixing and manipulation is necessary, and when a rather thick creamy sticky consistency is obtained, a thin coating is smeared in the bottom and walls of the cavity. A small round burnisher about the size of the head of an ordinary pin is used for introducing the cement; it is liable to get on the edges, if the burnisher is too large, and this must be avoided. Into this cement the metal is quickly placed, and in the case of amalgam the best way is to take several small pieces and burnish them from the edge to the center; these first pieces should be softer than the rest of the amalgam, because when the cement is soft it will flow to the edges under too much pressure. By waiting a little before putting in more and harder amalgam the cement will set sufficiently to remain in place and still not be hard enough to crumble when the metal is being condensed.

For gold fillings the cement is manipulated and introduced as before; but the first piece of gold ought to be large enough to cover the whole cavity. The best gold for the purpose of starting these fillings is a plastic or crystal mat gold, as it can be cut to the right size and will not tip. The gold is worked into place with large points and hand pressure; the round or pear-shaped points are the best, as they have no sharp edges. The same precaution should be taken in condensing the first pieces of gold as with amalgam on account of the cement being soft. Both gold and amalgam fillings are completed and finished as without the cement.

The most important point to be observed in making combination fillings is to use the right quantity of cement; and when it is remembered that the main purpose of the cement is to unite the metal and the tooth by reason of its adhesive property, no more cement should be used than will accomplish this. The cement will also prevent the tooth from discoloring when amalgam is used, and this is of greatest importance when large contour fillings are to be placed in bicusps, and the patient is unable to pay for gold; also if the labial wall in front teeth is thin and translucent the light color of the cement will look a great deal better underneath than the reflection of gold.

There is another side to be considered when lining the cavities with oxy-phosphate cement, and that is where the cavity is very deep and close to the pulp. The opinions of the scientific and most experienced members of our profession on pulp-capping and the effect oxy-phosphate cement may have on this organ in deep cavities differ radically, and the difficulty of positively deciding when and in which cases the cement caused the death of the pulp, makes it impossible for me to deduce a conclusion, so I will leave the decision to the discretion of the individual dentist, and will only give my personal observation and the method by which I have had most satisfactory results.

Procedure in Deep Cavities.	and the cavity opened and enlarged sufficiently that all decalcified dentine can be removed; sometimes it is difficult to accomplish this, especially under the cusps and overhanging enamel. Where the tooth
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is very sensitive, remove what can be loosened without pain, dry thoroughly, wipe cavity with pure carbollic acid, dry again with bibulous paper, and place in cavity a pellet of cotton dipped in Robinson's Remedy. Seal up with temporary stopping and leave from twelve to twenty-four hours. If the carbollic acid is not applied first, considerable pain will be caused. At next sitting the tooth can be excavated with very little or no pain; this done, the cavity is sterilized and the dentine is lined

with a non-irritating protective varnish; there are several good ones in the market. The cement to be introduced next to the dentine must be most carefully mixed and manipulated so as to form as perfect a chemical union as possible, and must not be too thin. If these precautions are not observed there will be too much free phosphoric acid, and as this is a great irritant, it might, in spite of the varnish, cause a congestion of the pulp, which might end in its strangulation.

As a rule the destruction and consequent removal of dentine is great in such cavities, and it is better that the quantity of cement put in first should not be more than to cover the dentine over the pulp. This layer of cement must be nursed into place with a most delicate patting so that all pressure on the dentine is avoided; this is now allowed to set sufficiently that the balance of the cement may be mixed to a putty like consistency and manipulated with the fingers and then packed into the cavity under pressure. This can be done by placing a piece of vulcanite rubber or slightly softened gutta percha over the opening of the cavity when this is about full of cement, and with a large, round or flat burnisher, as the case may require, produce the pressure. When this has set it is very hard, and adheres firmly, and will support a frail tooth, or enamel walls denuded of dentine in a way that no other material, that we know of at present, will do. The surplus cement is now cut away from the edges, and to a sufficient depth, about two millimeters, so as to place a good strong metal covering over this cement. The metal is to be united to the cement by the aid of a new mixing, as described.

The question of the ability of the cement to support enamel walls, and also its adhesive quality in fillings, has been disputed, but any one can prove my assertions to be facts by filling a large cavity without undercuts in the manner just suggested, and then trying to pry the filling out, or break the enamel away from the cement. Furthermore, how do porcelain inlays stay in cavities if not by the aid of the adhesive cement?





New Jersey State Dental Society.

Thirtieth Annual Session, Asbury Park, N. J., July 18, 19, 20, 1900.

The session was called to order at 11 a. m., Wednesday, July 18, by the President, W. E. Truex, D.D.S., of Freehold.

Vice-President Riley took the chair, and the President's address was read by Dr. Truex.

President's Address.

Another cycle of the great wheel of time has passed around, and we are assembled again on the shore of the Atlantic for mutual benefit in our chosen profession, social intercourse and recreation, and for the advancement of the best interests of the dental profession in our state, and to do our part in the advancement of the profession throughout the world.

It is with the greatest pleasure that I am able to announce that during the past year no member of our society has been called to his long rest, and, so far as we know, we are for the most part in the enjoyment of our usual good health and spirits. For these blessings we should be duly grateful to an all-wise and merciful Creator.

There is, however, one of our most active members who has at last, though a little late, arrived at years of discretion, and taken unto himself a wife. We offer him our congratulations, and advise him that if he "hold" fast to only that which is good in the matrimonial state, he can well "brook" all the trying times incident to double blessedness.

It is with great satisfaction that we note the increasing interests shown in all dental matters, theoretical and practical, the lengthening of the course of study, the advancement of preliminary standards, as related to entrance to colleges and admission to state board examinations.

All these are steps in the right direction, and will all come in for a share of our attention during the meetings, and it behooves us as one of the most progressive dental societies in the world to give these matters most careful and conscientious consideration. The organization of a new dental society in our state is also a step in the right direction, and is a cause for congratulations. We extend it our best wishes for its success, and the assurance of any assistance that we can give.

There is one matter that I wish to present to the society, and recommend such action as it may deem wise. I am of the opinion that most of us believe that dentists in our state are exempt from jury duty. I have learned, to my great inconvenience during the past winter, that this is not the case, and I am informed by a prominent judge of the highest court of our state, that in his opinion this should not be so, but that a law should be passed making dentists exempt, the same as physicians.

We are very glad to see with us so many familiar faces from other states, and equally glad to see a few not so familiar. To have you with us is a pleasure, and we desire now to extend to you the privileges of the floor. We will feel it a compliment if you will avail yourselves of the opportunity to take part in our discussion, and thereby give us the benefit of your experience in all matters under discussion.

As we proceed with our regular business, and I am called upon to preside over your deliberations, I assure you I shall endeavor to do so in all fairness, and ask your consideration in all my rulings.

On motion Drs. Iredell, Adams and Vinson were appointed a committee to report on the President's address.

The President thereupon resumed the chair and called for the proposal of members.

The chairman of the Membership Committee reported that the following applications for membership had been received, and considered and reported favorably by the Membership Committee:

Charles A. Rice, Passaic, N. J.; sponsors, Dr. Frank G. Gregory and Dr. J. Allen Osmun. H. W. Ryman, Summit, N. J.; sponsors, Dr. W. H. Pruden and Dr. George M. Holden. J. R. Gibbs, Somerville, N. J.; sponsors, Dr. W. H. Pruden and Dr. C. S. Stockton. W. M. Thompson, New Brunswick; sponsors, Dr. William E. Truex and Dr. Frank L. Hindle. C. M. Henry, Bernardsville, N. J.; sponsors, Dr. H. Iredell and Dr. J. A. Osmun. William N. Robinson, Freehold, N. J.

The society then proceeded to ballot upon the foregoing applications, Drs. Hindle and Vinson being appointed tellers.

The balloting resulted in the unanimous election of the applicants to membership in the society.

On motion Dr. Joseph Head, of Philadelphia, and Dr. Leo H. De Lange were elected honorary members of the society.

On motion the society then adjourned to 8.15 p. m.

Evening Session.

President Truex called the meeting to order.

The Secretary read a communication from the First District Dental Society of New York, expressing its thanks for a contribution of twenty-eight books and two pamphlets from this society to the Dental Section of the Medical Society. On motion the communication of the District Society was accepted, and the action of the Secretary in donating the books, etc., concurred in.

The Secretary also read the resignation of Dr. Howe, of Passaic, N. J., who has retired from the profession.

On motion the resignation of Dr. Howe was accepted.

Dr. Stockton stated that in the new library at Newark, N. J., some shelves and a room, if necessary, would be set aside for a dental library if the dental profession would build the shelves.

Dr. Osmun expressed his willingness to receive and take charge of contributions for the dental library referred to by Dr. Stockton until space in the Newark Library was prepared to receive them.

On motion of Dr. Stockton, Dr. Alonzo Irwin, of Camden, N. J. was appointed a delegate to the International Dental Congress at Paris in place of Dr. Stockton, who stated that it was impossible for him to go to Paris.

Dr. W. G. Chase then presented the following report of the Committee on Dental Literature.

Report of Committee on Dental Literature.

The year, as measured by our annual meetings, shows some progress in the science of dental surgery. While it is true some of the same old straw is being thrashed over, in the effort to get a few more grains of wheat, and while, as a whole, we may not like to read so much that has been published, and re-published, yet it is just possible that we may glean a little knowledge, or, rather, a more thorough understanding of the subject, from seeing it treated from different standpoints. Several papers upon dental education have been read and discussed, but up to the present there seems to be no unanimity of action; mainly from the fact that the field is a large one, though the tendency is in the

right direction, requiring a higher preliminary education. The status of the dental surgeon has been written upon, and while more light has been shed on the subject, yet no definite point has been gained, nor can the legal status be determined, until the highest courts of law in the country have passed upon the question. If some society or individual with courage sufficient would force this issue, they or he would confer a boon upon the profession at large. It is a question that will have to be settled sooner or later.

The question has been or is raised, I think, in New York as to the administering of an anaesthetic to patients by one who only holds the dental degree. If dental surgery is a branch of the healing art, a branch of medicine,, we want all the privileges and rights and protection pertaining thereto; if it is not such a branch, and is only a mechanical trade, the sooner we find it out the better, for then we would know what to do to make it legally a profession and a branch of the healing art of medicine.

Your committee have seen no new developments or experiences described in reference to the functions of the tooth pulp after the tooth has become thoroughly formed.

We have had papers on porcelain work from all sections of the country, but the mooted question of high or low fusing is still unsettled, and in all probability will remain just where it is to-day, the preference being decided by the individual dentist who uses the material.

It is an undisputed fact that porcelain as a material for replacing tooth substance, lost by the ravages of caries, has come to stay. It is not an easy substance to handle, and failures will result from the careless use and bad judgment displayed in selecting the cavity where it is to be placed.

There are several methods described in the journals for making matrix, notably the water bag method, which is well worth examining and trying.

A new and revised edition on Chronic Alveolitis, etc., by Dr. Henry S. Nash, made its appearance last fall. A thorough criticism can be found in the *Dental Cosmos*, Vol. XLI., No. 11, pp. 1197.

A question that is unsolved, and that is bothering not only the dentists of America, but also of England, and no doubt all the thinking men of the profession in the world is, "Why teeth decay?"

**Cause of
Caries.**

This question has been put into the hands of a committee of three learned gentlemen of the medical profession of England, through the efforts of James Cantlie, M.B., F.R.C.S. Unfortunately, they did not put a dentist upon the committee. There may be some

one in this country who is making at this time a special effort to solve this question. It is a question that should be submitted to a committee of the brightest and most learned members of the profession, and, if possible, enlist the services of one or more eminent medical men, who are recognized authorities, especially upon diseases of children, though it is doubtful if the true solution can be found in the child, for who of us has not among his patients those who were immune from dental caries up to manhood or womanhood, and sometimes until well advanced in life? At this time, I have several cases of this kind in my practice, one of which was under my care but the other day. She never had occasion to have a tooth filled until one year ago. She has a sister whose teeth are decaying very rapidly at the age of fourteen, and who had more or less trouble with her deciduous teeth. Here are two opposite conditions in the same family, same parents, and, if possible, environment better in the case of the latter child than in the former.

Recently there appeared an article claiming that caries in the teeth is caused by pernicious anaemia.

We have with us a gentleman who, I understand, is making research along this line—Dr. T. C. Stellwagen, Jr.

A pocket medical dictionary, revised edition, by George M. Gould, is a convenient and useful book, containing practically everything ordinarily needed by the practitioner or student, a constant study of which would eliminate the careless use of technical terms.

The question of disseminating dental literature among the public, that they might thereby become educated, and able to discriminate between the good and the bad, thus being enabled to shun the dental shops, and also be brought to a just appreciation of retaining their teeth, and using proper hygienic means to that end, has not, to my knowledge, materialized.

**Educating
the Public.**

The seed which our late President, Dr. Osman, sowed probably fell upon the rocks, and the birds devoured them. One way to reach the general public would be through the public schools. If an act could be passed making it obligatory that all the children's teeth should be examined, and, if found defective, the parents be required to have the defect remedied, either by sending the child to the family dentist, or, in case the parents' means would not permit, to a dental infirmary, or, as in the case of the sick, to the county, or poor dentist, such being appointed, as is the physician, to look after the poor, and paid by the county, such a law would do far more towards educating the people than all the literature that could possibly be published in years.

I realize I am beyond the functions of my committee work, but I trust I will be excused for broaching this subject because of its importance.

Whilst I am not now a full fledged Jerseyman, yet I am proud of the profession in this state, and always expect them to take the initiative in all lines of advancing the good work, and as a law regulating the care of the school children's teeth, both public and private, would be an advance in the right direction, I feel sure it would not be long before other states would be following the example of Jersey. It requires courage, stamina and a devoted purpose to blaze the way for advancement, all of which qualities are to be found among our members.

On motion the above report was received and placed on file.

Dr. H. B. Tileston, Louisville, Ky., then read a paper entitled "Non-cohesive Gold."

Discussion on Dr. Tileston's Paper.

**Dr. Stockton,
Newark, N. J.**

This paper brings back memories of other days. When I began the practice of dentistry soft foil was almost exclusively used. It would have been better, perhaps, if I had learned to use cohesive foil, but the process was reversed with me, and I was taught to use soft foil first and when necessary to use cohesive.

I say without hesitation that soft foil is the easiest and quickest material for filling teeth, and if properly used it will last as long or longer than any other mode of filling teeth. To some it may seem a slovenly method, but a mat of soft foil can be placed in a cavity and made to stay there and save the tooth, in a few minutes' time, when it would take a half hour or an hour to fill the same cavity with cohesive foil. Some of you may have seen cavities where you wondered how the gold stayed in so long, where you could run an instrument almost through it or tip it out; yet it has stood there for years, and would stay for years to come and save the tooth. That cannot be said of cohesive foil. If there is a defect of any kind in cohesive foil, unless it be attended to, it will be lost. There have been a great many cases that I have seen and a good many that I have filled myself, where the cavities in the front teeth have been so large, with the dentine all gone and nothing left but the enamel, where you could take a mat of soft foil, pack it up against the enamel and fill the rest of the cavity with anything you liked, tin foil for instance, and the tooth be saved for years, and you

could see that gold filling through the enamel. Any man filling today with cohesive foil is proud if he can see the gold shining through the enamel of the tooth. He thinks that he has done a splendid thing by his delicate touch and manipulation if he is able to fill such a tooth with cohesive foil and not crack the enamel. So there are a great many advantages in soft foil, and we ought to be able to use both kinds. It is not a safe gold, as the essayist has said, to fill out and contour with. There have been those who have said that could be done, but it is not the best practice; cohesive gold is a harder filling, and will bear the stress and the wear and tear of mastication better. Any man who becomes familiar with soft foil will never throw it away; it is a help that he cannot afford to do without if he wants to save teeth, and when he gets along in life and wants to do his work quickly and well and make all the money he can out of the hours that are left he will use soft foil and top it off with cohesive.

I learned the use of non-cohesive gold in the office where I first commenced my study of dentistry, and where that was the only kind used. I believe in non-cohesive gold, but not for doing the extensive work that Dr. Tileston and some other members of the profession agitate for it. It has its place in my practice, a place which I consider a very valuable one, but to use it exclusively for a considerable number of cavities, and, as some do, for nearly all classes of cavities requiring gold fillings, I consider a mistake. Those that do it will find that while many of their fillings will last as long as a cohesive filling, yet a majority of their fillings will be failures. This has been proven to me by close observation, for I have had abundant opportunity for watching the fillings of those who have more closely confined themselves to non-cohesive gold. To-day, however, and in all the years that I have practiced, a place has remained for the use of non-cohesive gold, and that is in the cervical parts of cavities in the bicuspid regions and afterwards finishing with cohesive gold. I do that still.

The chief reason why I use it, however, is on account of its non-conductive properties, a feature which I have mentioned in the meetings of the National Association, and which has impressed itself upon me more and more as the years have gone by.

Non-Cohesive Gold
a
Non-Conductor.

From its very nature it will prevent the transmission of thermal changes to the pulp. I make a mat of non-cohesive gold and place it under an amalgam or a cement filling as a non-conductor, and it has been a revelation to me to see how perfectly it acts in that particular; it is as perfect as gutta percha, has very much more adaptability, and permits the build-

ing of a permanent filling above it. My attention was first directed to it in past years from the fact that in removing old fillings of non-cohesive gold put in many years ago I found the distance from the filling to the pulp almost infinitesimal, and never had there been any trouble from thermal changes in those fillings and removing those fillings and inserting cohesive gold would permit thermal changes resulting in the death of the pulp. That called my attention to its non-conductibility, and if you will try it for that purpose where you desire a non-conductor you will undoubtedly meet with a large degree of success. I do not believe in the indiscriminate use of dead soft foil, non-cohesive foil, I think it is a mistake. No doubt time is saved and very many times we have successful operations from the use of this kind of gold, but when one commences to use it in that way, seeing its ready adaptability and the rapidity with which it is inserted, one is apt to be led into somewhat slovenly work. It takes more time to work with cohesive gold, but there is no cavity that can be filled with non-cohesive gold that cannot in my opinion be filled a great deal better with cohesive gold.

Dr. Cruman,
Philadelphia.

It has been a marvel to me that the non-cohesive use of gold has almost completely passed away. I do not say the use of non-cohesive gold;

I do not say the use of soft gold; I say the non-cohesive use of gold—the use of gold foil by the wetting process. To an expert it would make very little difference whether it was absolutely non-cohesive or partially so; he would probably prefer to have it about half way between. My own practice was to take cohesive gold and always keep two lots on hand, one that was fresh, which I used when I wanted cohesive gold, and the other about half used, which I used when I wanted non-cohesive. I think those who do not use it in that way waste a great deal of their own and their patient's time, as large fillings can be put in in that way in a few minutes, and very perfect fillings, too. I have one in a molar in my own mouth which probably took from one and a half to two sheets of gold. The dentist who put it in died in May, 1874, and it is still in right good condition. I was in his office twenty minutes only. We had a great deal of business to transact, besides the filling of that tooth, and I don't think I was in his chair more than ten minutes. He was my preceptor, and I have seen him time and again prepare his cavity, tear out his gold from the book, roll it in his fingers, take another piece of gold and make a few pellets, put the cylinder he had made into the cavity, pack a few pellets around it, condense it, and finish the filling almost as quickly as it has taken me to tell you. Ordinary cavities he did about four an hour; large cavities would take a longer time. He was particularly expert, and accomplished his work

very quickly, but the best evidence of the durability of those fillings is that I frequently see them at the present day, and, as I say, he died in 1874.

My friend, Dr. Du Bouchett, who died in Paris several years ago, adopted a very similar method. I have seen fillings he put in that have been in use for forty years and perhaps longer, preserving the teeth perfectly.

There was one method of using gold non-cohesively that has gone out of use, and which had a very peculiar effect. The gold was rolled up in little pellets like barley balls, they were packed into the cavity until it was full, and then a wedge-shaped instrument was thrust into the midst of them and another packed in, the wedge again put in and another packed in until the gold was so thoroughly condensed that it was not possible to thrust an instrument in again. Then it was thoroughly condensed at the surface. I have seen some of those fillings which, after a few years, protruded, and I have burnished them back again, and they have preserved the teeth perfectly for years and years, some having been in for twenty or thirty years.

The question arises why this is? We cannot concede that there is any virtue in the gold we use in a certain method; it is not confined to non-cohesive gold; any kind of gold used in that way, provided it will adapt itself to the conditions, will have practically the same effect. The only explanation that I could find is that where you use so much gold the instrument itself never comes in contact with the walls of the cavity; there is always a cushion of gold between the instrument and the walls of the cavity, and the result is that the walls are perfectly sound. Where you use the cohesive method with a molar the probability is that you have those walls somewhat pulverized, somewhat injured by the contact of the instrument; the instrument may not come in absolute contact, but the sudden blows being transmitted to the structure make it very much more liable to decay. When you finish close up to the wall, and it remains so, of course, the filling is perfect; if there is a little defect, as Dr. Stockton has so well explained, we have a condition that soon wrecks the filling, while if the gold is packed closely that does not occur.

Dr. Ames,
Chicago, Ill.

I have always had a place for this work, and think it right to put a soft filling into inaccessible places. That, it seems to me, tells the whole story. You can pack it back into places where you could not pack cohesive gold, and it seems to me that is really all there is of it.

Dr. Sanger,
East Orange. The thought that impressed me in regard to the paper was the value of returning once in a while to old methods. We have coming up a number of young men who have never had the good fortune to be instructed in the use, and learn the value of the remedies and methods that were in use years ago, and which have not been abandoned because of any inherent fault. Therefore, a paper of this kind is a good thing for a society. It calls the attention of the younger generation to the fact that they are missing good things that the older members are so familiar with that they take them as a matter of course, use them in their daily practice and are so accustomed to them they they do not think to speak of it.

For me to speak at length of the value of non-cohesive or dead soft foil would be a waste of your time, because the ground has already been covered fully, so I can only congratulate the essayist and you in that this subject has been brought to your attention, and I believe that, as the speaker said, if he can place in the minds of any one of our younger men a desire to test this for themselves, they will find that he has offered something that in its proper place and at the proper time is invaluable.

Dr. Crouse,
Chicago, Ill. I did not hear all of the paper, but the essayist made a statement which I would like to have explained, to the effect that there is but one make of gold that is non-cohesive, and I would like to know the reason why, because all pure gold is cohesive—bound to be. The way to make cohesive gold non-cohesive is a very simple matter. Place in your drawer with the gold some nitrate of ammonia on cotton over night, and that will have the effect, because all cohesive gold must be pure, and gold that cannot be made cohesive is not pure. That is a chemical proposition which cannot be disputed.

Dr. Cileston. I desire to express my appreciation of the kind-ly references which have been made to the paper. The dental profession has a way of running wild over things, taking up with a new fancy and carrying it out to such an extreme that they often make mistakes. We have seen that so often in the history of the profession in the last few years. At one time non-cohesive gold was the only kind of gold in use. Then our predecessors began to discover the cohesive property of gold, and made use of it, and then the profession gradually carried that to an extreme, and left out of consideration altogether non-cohesive gold. We had a somewhat similar experience with amalgam a while ago, but afterwards it came down to the rational use of that material. It is the same now with porcelain.

We are going wild over that, and are trying to put it in places where it is not applicable. All materials must be used with judgment. There are places for non-cohesive gold, and I think those I have called your attention to are the ones that it is most peculiarly adapted to. The gingival margin is one that can be best preserved by non-cohesive gold, and the history of the use of that material will bear me out as will the testimony of older men in the profession, like Dr. Stockton, who have used it. The use of it on the occlusal surface is so easily demonstrated to be best that I do not think it necessary to make any argument to sustain it. If some of you who do not use it would use it, and use it properly, and see how closely it can be adapted to the walls, and how perfectly the adaptation can be made to the walls and the margins in these occlusal cavities, I don't think you would ever use anything else. It is certainly as valuable as any other, and is practically a permanent filling in that locality if it is properly done.

I do not see how gold can be less a conductor in one state than in another if it is as dense. Non-cohesive gold might be so used as to make it so porous as to affect it in that way, and using it in large masses it is probably impossible to reach great density, although sufficient for the preservation of the tooth.

It has been claimed, and is still by some, that non-cohesive gold has a peculiar property that is likened to antiseptics, and that may explain why these porous fillings preserve the teeth. The observations of W. D. Miller, of Berlin, show that non-cohesive gold has a slightly antiseptic property.

Concerning the element of the adaptability to the wall and the preservation of the wall, that is not from any peculiar property on the part of the gold, but merely because it has been introduced properly, and excludes everything else from the cavity.

The remark made by Dr. Crouse shows that he did not hear all of my paper. Pure gold is inherently cohesive, and you can render it non-cohesive by exposing it to the fumes of ammonia, and by merely abrading the surface you can contour the filling with any non-cohesive gold I know of except the one I mentioned. How that is made so perfectly non-cohesive that you cannot make it cohesive, I do not know. I also pointed out the fact that needle-point workers can bring about a species of cohesiveness in this kind of gold by merely cutting through it, as stated in the paper. Just what renders the gold non-cohesive I do not know. That is a secret. There are other golds that may be just as pure as a metal, but whatever the material is that is introduced on the surface of this one make of gold it is quite sufficient to render it non-cohesive even in the presence of mallet force.

Dr. Patterson. I would like to have my attention called to the experiments of Dr. Miller in which he found that there was a slightly antiseptic property in dead soft foil. I thought I had read every word Dr. Miller had ever written on the subject of the experiments he made in regard to gold and tin, and I should like to find out where he said there is a slight antiseptic property in dead soft foil.

Dr. Tileston. You will find a list of metals in the American System of Dentistry in an article on that subject contributed by Dr. Miller several years ago, and there he mentions non-cohesive gold as one of the materials he experimented with; also gold and tin and old gold fillings from teeth and fillings made with copper and amalgam, which we all know has a very decided antiseptic effect. He mentioned non-cohesive gold as retarding the growth of bacteria in the cultivating medium for six hours. A very slight retardation of the growth, of course, and it did not amount to anything, practically, for us.

On motion of Dr. Sutphen the paper was then passed with a vote of thanks to Dr. Tileston.

Dr. F. L. Fosheim, of New York city, then read a paper entitled, "The Combination of Oxy-Phosphate Cement with Gold and Amalgam Fillings."

Discussion of Dr. Fosheim's Paper.

Dr. Osmun. I am impressed after listening to this and the preceding paper with the thought that this session is largely made up of manipulative procedure. It seems to me the great thing to be sought after in using cement in combination with metals is manipulative dexterity. There is nothing I can add to the paper except to say that it coincides with my own observation and experience, and I can recommend it in that class of cavity. It is a mighty good thing to have when you want to use it. In its place it is invaluable, and out of its place it is no earthly good whatever.

**Dr. Goldsmith,
New York.** I think what the essayist has said is very much to the point, and I desire to indorse it. There is one point I might emphasize. While I have no exact data on the subject, I never like to let the oxy-phosphate touch the dentine if I can help it.

I cannot say it causes the death of the pulp, but it seems to me it in-

duces it, and I think it is desirable to introduce something in the way of a varnish between the oxy-phosphate and the varnish.

Dr. Register,
Philadelphia. The subject is one that has interested me in years gone by, and I have had some little experience in combining the phosphates of zinc and alloys. I never use them in combination with gold.

In using my mixture as a filling, while it has worked very favorably in my hands as a tooth preserver, I do not think it makes a good filling material.

Dr. Tredell,
New Brunswick. My observation is that oxy-phosphate absorbs moisture in the cement, and that it appears to irritate the pulp, and I have seen some cases where I thought that the death of the pulp was due to the effect of it. It has been my practice to protect the parts as much as possible with some good coating material.

However, the principal point I desire to make is that we should use oxy-phosphate a little cautiously

Dr. Fosheim. You will find that in my paper I express the opinion that the oxy-phosphate is dangerous to the pulp as has been suggested by some of the members.

Thursday, July 19, 1900.

The session was called to order at 10.30 a. m. by the President.

The Membership Committee reported that the following applications had been received: Edward H. Webb, Jersey City, sponsors, Dr. William C. Pruden, Dr. Frank H. Gregory; Miss Mary A. Morrison, Salem, N. J., sponsors, Dr. A. Irwin, Dr. J. G. Halsey, Dr. J. F. Lummis; Dr. Joseph B. Sharp, Morristown, N. J., sponsors, Dr. J. F. Lummis, Dr. A. Irwin, Dr. J. G. Halsey.

Dr. A. Irwin. I have a matter which I wish to present to you, which will require only a few minutes. To be able to present it in a brief manner, I have written it out.

A society called the Southern Dental Society of the State of New Jersey has been organized by the dentists practicing in the seven lower counties. It starts with a membership of twenty-three, and meets on the third Wednesday of each month (except July and August), in the Masonic Temple Building, Camden, N. J.

The officers are: President, Dr. J. E. Duffield, of Camden; Vice-President, Dr. O. E. Peck, of Bridgeton; Recording Secretary, Dr. A. K.

Wood, of Camden; Corresponding Secretary, Dr. W. W. Crate, of Camden; Treasurer, Dr. Mary A. Morrison, of Salem; Executive Committee, Dr. A. Irwin (Chairman), of Camden; Dr. J. G. Halsey, of Sweedsboro; Drs. C. H. Tuttle, E. E. Bower, A. B. Dewees, of Camden; Dr. J. F. Lummis, of Bridgeton.

The society has, in fact, been holding meetings for one year. Each meeting has been characterized by increased interest, renewed activity and enlarged usefulness.

Its object is to develop and utilize for mutual benefit the latent dental ability of South Jersey. It desires the co-operation and fraternal interest of the New Jersey State Dental Society in all efforts to elevate the profession of dentistry and promote the welfare of the individual dentists.

A copy of our constitution and by-laws is presented to you.

Permit me to call your attention to the following: According to the amended by-laws of the National Dental Association, the Southern Dental Society of the State of New Jersey is entitled to four delegates (or one for every six members) to the National Dental Association.

We now have two societies in our state, the Central Dental Association of New Jersey and the Southern New Jersey, working along similar lines and in harmony with the New Jersey State Dental Society. These societies supplement the efforts of the State Dental Society by local work, thus filling a position among the dentists that the State Society is utterly unable to meet.

Under these circumstances would it not be a wise measure to appoint a committee to draft a by-law authorizing the State Dental Society to admit as delegates, one for every six members (or such number as said committee shall deem it expedient to admit), as representatives from the local societies into the meetings of the New Jersey State Dental Society. Such a by-law would work advantageously for all three organizations. First, it would interest the local members in the State Society. Second, it would enlist the more hearty co-operation of the local societies in the state work. Third, it would give a widespread impetus to the advancement of the science and art of dentistry in New Jersey amongst individual dentists. The advantage to the New Jersey State Dental Society would also lie in the fact that these local societies would become feeders to the parent society. The material thus furnished would consist of members valuable in proportion to the proper training received by active membership in the local societies. It is a legitimate conclusion that trained men are worth far more than raw recruits.

There are other considerations which would take too much time to enumerate, why the addition of a delegate by-law would accrue to the advantage of the New Jersey State Dental Society. They will occur to your

minds when a discussion of this phase of dental society work is entered upon. Enough has been said to call attention to this subject, and I would most strenuously urge that a delegate by-law receive your favorable attention and immediate adoption.

On motion it was ordered that the report be received and a committee of three be appointed by the President to consider the same and report at the Friday morning session.

On motion of Dr. Stockton, Dr. Holbrook was chosen a delegate to the Paris Convention.

Dr. J. N. Crouse was granted the privilege of addressing the society.

Dr. J. N. Crouse, I have always thought that this society was the best place, probably, to discuss a subject such as I am
Chicago, Ill. going to discuss here, because it is a kind of free-for-

all; that is, I have always considered it so; this is the first time I have had the pleasure of meeting with this Association, and the more I see of it, the more I am confirmed in my opinion that this is just the proper place to present a matter which interests the whole dental profession.

I thought it might be interesting to review rapidly all the conditions before the Protective Association was organized. About the time it was organized, the Crown Company had got a decision through the Circuit Court and Court of Appeals in favor of the Trowbridge patent. Other patents had been solicited, and the Dental Protective Association grew out of their active operations. For instance, the first I knew of it, they were in Grand Rapids and Milwaukee and different places soliciting and procuring licenses from practitioners of dentistry who were doing crown and bridge work. Their methods were peculiar. They would go through a town and get all the licenses they could, and then advertise in the local papers that no others were allowed to do that kind of work. The notices ran substantially like this: "A. B, and C are the licensees of the International Tooth Crown Company, and they are the only parties authorized to do crown and bridge work; any parties doing work, or having work done by other parties than those named, are liable to the International Tooth Crown Company for damages." You can see what a formidable document that was, and how embarrassing it was to the practitioners.

I paid out of my own bank account a retaining fee to our present attorneys, as I knew them to be competent to handle the question, and as soon as the organization was perfected, and before we had any funds in the Association, we commenced active work

Early Fights
with the
Crown Company.

against the Crown Company. Within six weeks from that time we had stopped their agents from soliciting licenses all over this country, because as

soon as they would go through a town and solicit, the dentists in that town would send their membership fees and join the Protective Association, and it was a gain for the Association as long as they continued soliciting licenses.

Before we organized the Protective Association, the Rubber Company had had a hand up there, and had been pulling our leg and stringing us up in every form. For instance, we would solicit funds and put them in the hands of an attorney, and, as happened in New York and other places, the attorney would take our fee and then go at the Rubber Company and the Rubber Company would go at him and give him a fee about twice as large as the Dental Association, and run the case to suit themselves. That thing was proved in New York. So much for that. We went then with our attorney, and tackled them in Milwaukee first, and filed a bill there to compel them to set a time when they would put in all their testimony. We also filed a cross bill asking the Court to stop them from using such notices in the newspapers, and the Court refused our bill on the ground that it could not come in in connection with this bill. The Judge said that if we would put that in as a separate bill, he would grant it promptly, because it was nothing but a species of blackmail; that is the way he put it.

Now then we drove them from Milwaukee; we attacked them in Grand Rapids in the same way, and each place they ran until they got into New York in the Federal District Court, where they had had the decision in their favor, as the most favorable place to fight their patent. And there we got the reversal, which was confirmed by the Court of Appeals in New York.

That was in 1896, and everybody supposed the trouble was over. In about two years after, something like that, we got a letter from some of the witnesses in Bethlehem, Pa., stating that the Crown Company had been there and taken testimony in regard to the suit and wanted to know of me what it meant. A month later I met a gentleman connected with the Crown Company, who was not generally known to be a stockholder. He sat down and had a talk with me at the hotel. He said: "We think we are going to get a reversal of that former proceeding, and what will your attitude be?" I knew this man to be a stockholder of the Crown Company from the first of the organization. He was the first member who joined the Protective Association. He joined it simply to know what was going on. I was therefore guarded. I said: "There is one proposition I will make to you on that question; that is, the members of the Protective Association must be let alone. I have not the same interest in those outside that I have in the members of the Protective Association, and they must be let alone and not disturbed." He said: "Will you take in new

members?" I said: "I don't know what we will do, it is too far off. I don't think you will get your decision, but it is too far off."

**The Recent
Kyle Case.** They secured a man by the name of Charles O. Kyle; he was hired by the stockholders of the Crown Company to stand as a defendant; the record does not show who hired the attorney, but the inference would

be that he being hired by the Crown Company, the same is true of the attorney. That is a matter we will look at a little later. It all comes down to this, it is simply a case of collusion. They went up to Bethlehem and took the dentist up there (the poor fellow is now dead), and also his wife or daughter, and they said they could not remember whether it was 1878 or 1877 when he did that work, because they thought the question hinged on whether it was 1877 or 1878. They delivered the testimony, and then took a member of the profession along with them who made models, and got this woman who wore those pieces to say they were exactly the pieces she wore, and her two daughters said the same thing. And then the dentist who made the models came out and said "They are not what she wore at all. I made those models so many weeks ago, and this is what she wore. On one or two other affidavits they went before a Judge and had the case argued. In the middle of the argument, or at a recess in the argument, Mr. Dickenson stated to the Court, "Your Honor, I have just learned that the parties standing here as defendants in this suit have been paid by the International Crown Company to stand as a defendant; I would not go on with the argument until the Court knew that fact;" and they went on and decided that this man Kyle was liable to the Crown Company as an infringer.

It may surprise the members of the profession, and members of the Association especially, when I tell them that after sending out two as urgent appeals as I could to each member, there were less than five hundred out of thirty-four hundred who paid their assessment.

So the Association was virtually defeated when this decision was rendered. I took advantage of that, and corresponded with the members to see whether they wanted me to go on with the Association, and the appeal was so strong and unanimous, that I went to work and reorganized the Association. We have double the members; we have the money in the treasury; we have the evidence also.

The Boston Cases. Now what is the difficulty, and what am I here for? Along with this work of the Protective Association, the effort of the Crown Company has been to stampede the Association. They made their first

attempt in Boston, where they sued and put receivers in the offices of nine of the leading dentists. I say receivers, that is, they put a man in there

who took charge of the office as was done on a decision of the Cash Register, which was rendered in favor of that patent; they put some receivers in stores on some formal law. There is no other state in the Union where that has been done. And the first thing I knew was a telegram from Boston from one of the members who was sued, saying: "There has been a keeper put in my office, what shall I do about it." This telegram got to me about eight o'clock in the morning, and I immediately answered: "Throw him out doors, break his neck." My attorney got to his office about ten o'clock, and I informed him of the fact, and he said: "Crouse, that won't do. I will telegraph to an attorney in Boston to take care of the matter." During the afternoon I got telegrams from four or five of the men, and we received a telegram from the attorney saying get a bond for \$45,000, send it to us, and we will get the keepers out of the offices. That necessitated getting a bond for \$45,000. I put up the securities and got the bond and telegraphed the bond and they got the keepers out, and the Court handled the Crown Company without gloves; he denominated it as a species of blackmail; declared that they had no right to put the keepers there, and if they did not take them out and pay all the costs in twenty-four hours he would fine them.

**Settlements
in New Jersey.**

I am coming now to another question which is unpleasant to me, but it is important that it should be discussed right here at home, and that is as to the men in New Jersey who settled. The next difficulty we ran against in that line was a dispatch in one of the Chicago papers that five of the New Jersey men had settled with the Crown Company, giving the amounts. That meant another fight. Not a defence of the members as against the patents, but to prevent a stampede of the Association. I am willing to give the New Jersey men who settled the credit of not really understanding what they did, although they had before them a sample of what the Boston men did, and what the Association did for them. They had letters from the headquarters not to settle, but, nevertheless, they settled, and that has been a source of a great deal of trouble and annoyance to the Association, and I have no doubt to the members. I bring this matter up here because I want the members who did settle to discuss it on the floor; if they are wrong I want them to apologize; if I am wrong I want to apologize.

In the first place, the putting of that amount of money, to say nothing else, into the hands of the Crown Company, gave them just that much more funds, which they are very much in need of, to fight their fellow practitioners. That is the first proposition. It is a little like the extreme case that happened in China, wherein the Germans who sent the rifles to the Chinamen have the knowledge now that those same rifles shot the head

officers of their government. I am willing to believe that the members who settled were not down deep in this in thought, as I have been, or they never would have made the settlement, because they certainly had no reason for it. The Protective Association has never failed; it has won every suit it has been in; it has defended every member of the Association except two who have been sued. Two men in the Association were sued by the Crown Company, and they were of a character that we did not trust; we entered their defense, but not in the name of the Association, and then they went on with the attorneys of the Crown Company and entered into stipulations which were bound to beat us in any place, and then we dropped their case. I notified the gentlemen their defense would not go on, they could have their \$10 back; we could not trust them as they had entered into this negotiation with the Crown Company and had forfeited all rights of the Association.

Now as I say, it was either a great mistake that the Protective Association was ever organized, or else it is a great mistake that these men should have settled. I am here to find out which it is, because I want to be on the right side if possible.

**Rumors
Against
Dr. Crouse.**

Now let us get at another very unpleasant question, which may not interest you, but interests me greatly. That is that a report is circulated publicly and privately, here and elsewhere, to the effect that I was manipulated by the Crown Company, that I held their stock, and would sell the Association out by and by. It has been circulated in this meeting and has been in the journals. I have been accused of dining and wining with Sheffield. I did dine and wine with him, but I did it for the interest of the Association. We were attempting to compromise. The attorney of the Association said: "Crouse, if these men start a thousand suits, as they are going to, you will have to give up all your time for the next three or four years to defend these suits, and you cannot afford to do it, and if I can effect a compromise with them on a basis that is honorable, I think it is right to do it." And not only that, but the whole membership of the Dental Association were urging me. I received letters by the hundreds asking "Why don't you shut the doors, why do you protect men who have not put up any money in the Association?" And we made a strong effort to make an honorable compromise. I did not commence the compromise. The President of the International Tooth Crown Company had one of the stockholders telegraph me to know if I would be home on a certain Friday, and signed it not with Sheffield's name, but signed "Stockholder in the Crown Company." I replied, "Yes, I will be home." On Friday, about four o'clock, a telephone message came, "Is Dr. Crouse going to be in his office for the next three-quarters of an hour?" My

daughter answered yes, and inside of the next half hour who should come into my office but the President of the International Tooth Crown Company. He said: "I suppose you are surprised to see me here. I want to know if I can have a private interview with you, and when?" I said: "When I get through work." He said: "Come down to the hotel?" I went down to the hotel, and he ordered refreshments, and he drank whisky and I drank soda water, and I think my head was the best of the two. His first proposition was that I had been working for the profession for twelve years, that they did not appreciate it, and I might as well drop it and make something out of this myself. He said: "There is half a million dollars in sight for you." Well, now, half a million dollars would be quite a comfortable thing for me to have, but I said I did not want to get it that way. Then he said: "You wouldn't take it?" I said: "No, sir, I wouldn't take it. I wouldn't take any sum of any kind on such a proposition." Then he said: "If you will stand in with us and help us win a suit, and then advise all the profession to settle, we will take half that we get and put it in the treasury of the Protective Association." I said: "That would be a damned nice piece of business for the Protective Association. Now," I said, "I will outline a proposition to you, which, if it is satisfactory to you people, I will call the Board of Directors together and see if they will agree on a basis of compromise to the effect that after I had notified the profession fully and completely that such a compromise would be made, to take effect at a certain date, all members of the profession not in the Association on that date must take care of themselves; I think the Board of Directors will be with me in that." That was the basis of compromise we talked about. I heard nothing further from him for two or three weeks, and then I received a telegram asking me to come to New York. Dr. Sheffield took me on one side, and he went right over the same thing. He said that the dental profession was not half as good as barbers. He said the barbers had more sense than the dental profession; they never paid their bills, they are not respected in the community as much as barbers, and why not drop them and make something out of this. I said: "If you want to enter into a compromise in this job you make an appointment with me with your attorney and the Association attorney wherever you wish tomorrow." He made an appointment, and what was his proposition? He says: "What is there in it for me or my company? If we make a compromise, will the Association give us fifty thousand dollars?" I said: "No, sir, we won't give you a cent." He said: "If we compromise, the Association has got to pay us fifty thousand dollars, and then all of them sign a license." I took my hat and got out of there as quick as I could. The next day I got a telephone message wanting to know if he could see me. His attorney came around and

said: "You folks went off in a huff. I think Sheffield will come around to your terms." We made another appointment, and Sheffield didn't come to that appointment at all. And then he telephoned that he would see me at two o'clock. I said: "No, I leave the city at once; I am going to Philadelphia." He came right over, and I took him to my room. I said: "Dr. Sheffield, you have made three propositions, none of which will stand the light of day; I do not want you to make me another such proposition," and I left him. He left the room, and I wrote him and another, H. A. Parr, never to come to the hotel, or speak to me again unless my attorney was present. That is the sum and substance of the stories that have been circulated on the question of my selling out. Really, I think I am the one to complain, because I think if there is any abuse in that kind of thing it is on me, and I have come to see now whether I am right or wrong. If I am right the whole profession should stand together. If I am wrong, let me out of it. I have had all the fun of this kind I want, and have my own business to attend to. If I am right there is not a member of the profession who ought not to be in the Association, and there is not a member of the Association who ought not to stand up to the matter. If I am wrong let us see where; put up your evidence. I have not done anything that I am ashamed of, except that I have made some mistakes here and there. They have attempted to force me in various ways to discuss this question in meetings, in order that they might know what our defense will be. They have got a sample now of what the defense will be in Court. We haven't any doubt of our ability to wipe up the earth with them, if there is anything of them left. They have commenced now about eighty-two suits in this country. I have a letter here, correspondence going on between the International Tooth Crown Company and our attorney, which I am going to ask the Secretary to read. It will explain some of the things that are going on, and will answer some of the questions which I might have to answer myself.

(Said letters read by Dr. Meeker.)

**Lawsuits
Against
Dentists.**

This brings us to the propositions of these suits. All the suits now are in common law practice, and they do not come before a Judge for decision; every case has got to be tried separately before a jury, and you can see if they keep it up, the immense amount of work there is before us, because if they should beat us on one suit, that does not decide the rest of them; we would simply appeal that suit to the next higher Court, take care of the member, and go on with the next case. We are confident we have plenty of testimony that will convince the juries which are selected from the intelligence of this country; they are Federal juries in the Federal Court; they have to convince twelve jurymen and one

Judge before they can get a decision. It involves an immense amount of work. How long they will keep it up I do not know, but they do recognize the Association and its attorneys, and they were going to commence at once a thousand suits against the members of the Association, and several thousand others to follow. And then they made the bluff that it would be necessary for the Protective Association to have a largely increased fund to defend all these suits, because they would be obliged to hire attorneys in different locations, and they thought that it was due the members of the profession and the Association, before Dr. Crouse asked for any further contribution of funds, that he should outline something of his defense, that the members of the profession might know what the probabilities of success were. That announcement has not been brought to the notice of the dentists, as I know of, because they have not been able to get the journals to publish it.

They went before the Court in New York and had one member of the Association sued, and asked to have his books examined to show how much bridge work he had done. Our attorney fought that, and the case will go on again on Monday. Our attorney ordered the witness not to answer, and then they held him up and ask that the Court send the attorney to jail. If they should get a judgment against any dentist in New York City in the Federal District with that kind of procedure, we will take it up to the Supreme Court and knock it out after they are all through, and they won't get anything. The fight is on to a finish, and the thing this Association has got to do is to break their necks, wipe them out, get them out of existence and be masters of the situation. If there are any questions that any one would like to ask, or anything left out, I would like to answer it. I would like to have this matter discussed in full in this meeting.

Dr. Crouse makes it exceedingly difficult for me to stand upon the floor as though I were a guilty man, and must get up here and apologize. I have no apologies to make to Dr. Crouse or anybody else for anything I have done. I could make it exceedingly unpleasant if I should say some things that I have had in my mind at times to say concerning this matter. But I do not propose to take that course. Dr. Crouse said that he had not gone into the journals with this matter. If publishing in his journal that the men who settled in New Jersey were traitors is not going into the journals and saying something, I don't know what is. There was no occasion for his making that charge, and it was unwise to do. I am not a traitor to the Protective Association. I immediately wrote to him and stated that under similar circumstances to those which existed at that time, I would do exactly the same thing that I did then. And so I say now.

Dr. E. S. Stockton.

Under exactly similar circumstances as those under which I settled with the Tooth Crown Company, I would do exactly the same thing again, without being a traitor to the Dental Protective Association, to the dentists of New Jersey, or to anybody else.

What I meant by being under similar circumstances is this. I did not suppose that Dr. Crouse would come here, though I have no objection to his coming, or that it would ever be necessary for me to go into a painful personal matter. Some few of my friends know—Dr. Crouse does not, and does not care—what I have gone through.

In the first place, I will say that I was a licensee of the International Tooth Crown Company, and had signed the agreement prepared by the Company, and under the terms of that contract it was exceedingly doubtful whether the Protective Association would be able to do anything in my behalf.

In addition to that, unfortunately, several years ago, I was induced by confidence in other people to go into an enterprise through which, and by which, I have lost all the gainings and the savings of a lifetime. That is a good deal. You know what dentistry is. You know how a man earns his money day by day, hour by hour; you know it is no fun, but it is hard work. In the commencement of life a man looks forward to what he is going to do, but it is a very different thing at the age of sixty-three to look back upon what he has done, and know it has all been swept away.

Just at that time, when this proposition was presented, I was in such a condition financially that my credit had to be protected. It had to be, traitor or no traitor, Dr. Crouse. I could not afford to allow my credit to be attacked in a suit. The gentleman who came to me said: "You have been selected as the first man; you are known in the dental profession everywhere, and I am instructed by the Tooth Crown Company to sue you at once; now I have known you for years, you are my friend, and you do not need to be sued. I will settle with you for so much money." I sat down to my check book and drew a check and settled with the Tooth Crown Company, because my condition was such at that time that I had to do it, and I would do it without any apology to you or anybody else. Every man is a judge of his own circumstances, and my character has been such in New Jersey and wherever I am known, that I am not a traitor to you or anybody else.

It becomes my privilege to explain my position
Dr. R. M. Sanger. in settling with the Tooth Crown Company, and I have no apology to make. I want to say that I settled with them because the Dental Protective Association publicly declared that they were not prepared to say that they could defend a man occupying my position. I have talked this matter

over with Dr. Crouse, and he has acknowledged to me that he was not sure, occupying the peculiar position that I did, that he could protect me. He said to me, "I would have dissuaded you from settling had I been East," and I think probably he would, and if I had not settled I probably would have been that much better off, because I would have stood by these people. At the same time I occupied this peculiar position. I became a licensee under the Tooth Crown Company some time before the Protective Association was formed. I paid them royalties. They had a record of those facts, which were, as Dr. Crouse admits, a quasi-acknowledgment that they had a claim against me. At any rate, I had signed the contract acknowledging their patents, which I believe to be correct, and had paid accordingly. They offered to settle with me for a small amount of money, and they threatened to sue me at once if I did not settle. The Dental Protective Association issued a circular, if I am not mistaken, Dr. Crouse, some time ago, when they were first formed, stating that they could not guarantee protection to those who had already taken licenses? Am I wrong about that?

Dr. Crouse.

You are right.

Dr. Sanger.

Dr. Crouse also stated in the City of New York, before a body of dentists, of which I was one, that while they would do the best they could, they could not guarantee protection to those men who had been unfortunate enough, owing to their past experience with the Rubber Company, to make a contract with the Tooth Crown Company. My lawyer, knowing these facts, said to me, "If you can settle for \$25 with these people, the fact being that you cannot have a guarantee of protection from the Protective Association, it is your duty to settle." Now I assure you that I had the utmost faith in the Protective Association; I paid my second assessment promptly. When my brother, who had come into the dental profession after me and was under no obligations to the Tooth Crown Company, asked my advice, I said: "Send your \$10 at once to Dr. Crouse; he will protect you."

So, gentlemen, I have no apologies to offer. In settling for \$25 I not only freed myself, but I set a maximum price upon the licenses of that company in settlement hereafter.

Dr. J. Allen Osmun.

It comes my turn now, since I have been put on the defensive, to tell the whole story, as I understand it, in order to clear my skirts from any imputation of traitorism, or disloyalty to my professional brethren, or to the Dental Protective Association. My history is something like this. I was a licensee of the Tooth Crown Company, and my reason for becoming one was this: I was haled before the Court in Newark and sued

for infringement of the Tooth Crown Company patents. I defended myself to the best of my ability, and the upshot of it was I had to pay somewhere in the neighborhood of \$700 or \$800 in settlement of that account. I had a good lawyer, and he advised me to do so, and I followed that course. They said to me: "We will settle with you for so much money and the costs, and you are to become a licensee of this company." I did so. I remained a licensee of that company for two or three years, and I paid them royalties at regular intervals, according to their schedule that they sent me. This Dental Protective Association then came on the carpet. I immediately joined. Dr. Crouse, I have always paid my dues and assessments, etc., up to date; is that true?

Dr. Crouse. I think it is, doctor.

And I am still a member, unless I have been kicked out, and if there is going to be a subscription for the protection of other dentists, I stand ready to do my share. But when this came on me I went immediately, of course, to my lawyer. He said: "You are in a position that you cannot defend yourself." We knew what Dr. Crouse had said to some of my fellow dentists, and my lawyer said, "If you can settle, you should better settle."

I do not know that I have any apologies to make, but I have this to say, had I known all that I know today I would not have settled with the Tooth Crown Company; I would have fought them. Furthermore, had I known all that I know now, I never would have settled in the first place, I would have fought it out then. If I had known then what I know now I would not have become a licensee, I would have fought it out. I felt when Dr. Crouse put in his journal that I was a traitor, that he did me a great injustice; I think he should apologize to me for that, because he knew nothing about these facts. I had no intention of being a traitor, and have no intention of being disloyal to the Dental Protective Association; I did what I thought was the best, and am only sorry that I have to stand up here and make this explanation to you gentlemen.

I think the agents of the Tooth Crown Company **Dr. Chas. H. Mecker.** must have lied, for they came to me first and said that being Secretary of the State Dental Society and pretty well known, suit would be first commenced against me. I said I would not settle, and the agent went away. He came back again, I think, three or four days afterward, and still I was in that condition. I was working for a legal friend and I stated the case to him; I told him my experience with the Rubber Company, where they had got a judgment against me for \$1,300, and he said: "Well, you ought to look into this a little further before you refuse to settle." The week afterwards the agent came in again and exhibited the checks of a

number of my friends; they were for higher amounts than what I paid; but I said to him: "Well, if you are willing to settle for \$25 to save trouble, I will do so;" and he accepted my offer and I took it up. I do not consider that I owe any apology to Dr. Crouse at all.

Dr. Crouse. Oh, no, not to me.

Dr. Meeker. Dr. Crouse knows that when the Protective Association was formed in New York, I was the one that went around and got most of the money in the Masonic Temple; some of the members are here today that I received money from; and I think my thirty years' connection with this society will prove that I am not a traitor. Furthermore, Dr. Crouse himself said to me last week at Old Point Comfort, that he thought he had done me an injury, and in the next issue of the *Dental Digest* he offered me his columns. I said "No, I wish to say nothing in your columns." Then he said he would make the amend himself. I told Dr. Crouse that I was very well satisfied with that, and supposed that he knew how I stood. He knew that my feelings were still with the Protective Association, as he had consulted me on other matters at that time, and also I have seen him at intervals at the Waldorf-Astoria when other gentlemen, members of the Dental Protective Association, were present, and he then told me that these settlements in New Jersey might prove a great advantage after all as determining the amounts that the Crown Company could collect.

Dr. F. Edsall Riley. My story is the same as the others. I am very sorry if I injured the profession in any way in so doing, but it seemed at that time the proper thing to do.

Dr. G. W. F. Holbrook. I was accused of being one of the traitors in camp in the *Digest*. I do not see how I could be a traitor. I have been interested in this work from its infancy. A member of the Protective Association I worked earnestly to help it in all its cases; helped to collect money for it and turn it into its treasury; I have done everything to help it, and to be called a traitor to my profession I did not like. I do not think I am in duty bound to apologize to Dr. Crouse, or his journal. I paid my money to relieve myself from any litigation. I am in litigation now that has been extending over four years and a half, and it is an unpleasant thing. I have had my cup full and do not want any more of it. I am willing to get out at any time. I paid \$100 to get a release, and if it had been \$250 I would have paid it.

Dr. C. H. Bradfield. The only bad thing about this is that the officer's checks were used to influence the younger men. Mr. Stewart called on me, and I told him I would not talk

with him, but he came around later and showed me a number of checks that he had received, and that is what guided my action in the matter, and I settled with him, for which, of course, as I see it at present, I am very sorry.

They appear to be very much alarmed here
Dr. Geo. Evans. about a judgment; I was too, first off, until I found out about what they could get. It is \$25 a year on what they can prove, and 15 per cent on what they can collect. I went to a prominent dentist in New York and I stated this fact to him. He said: "How are they going to find out?" I told him by examining our books. He said: "If they can examine my books and can find that much bridge work in it, they can find a damned sight more than I can." So he felt very contented in his mind. They have established the precedent in charging themselves. One of the lawyers in New York in the Irwin suit, which I defended out of my own pocket and paid \$7,000, I asked about this, and he told me it is an old established fact that where you have established a precedent in such a case as this, you can collect only what you establish as a claim. The Tooth Crown Company cannot collect anything, as I am informed, for damages to their business, from the fact that the company itself has fixed the amount. As to being advised not to settle, I have been advised by three or four lawyers, and some of them patent lawyers, to settle right away. They said: "You have got no time to fight this thing." I haven't, either, but I fell back on this Association to make good their promises, and I made up my mind it was my duty to stand fair and I am standing fair, and if Dr. Crouse and his Association do not support me in the way he should, I will settle, and settle very quickly, too, if I am going to be put to much trouble in the matter; but I am going to stand; I have confidence in him, to a certain extent anyway, and as a matter of principle I am doing it for the effect. I believe that any man who has invented anything, if he gets a patent on it, has no right to exact from his professional brother a license or royalty on that thing. I have always said that anything I invent you are free to use.

I think Dr. Evans has made use of one word
Dr. Adelberg. here that should be dwelt upon, and that is "principle." We go into a thing and do it from principle, and we want to stand up to that principle. Dr. Crouse has been called to account for using the word "traitor." A traitor is supposed to be a man who forsakes his colors, or as a military term a man is called a traitor who runs at the first fire; the moment he sees there is any danger of being hurt he turns his back and forsakes his comrades. Now this is a matter of principle for the men to stick to their colors, whether they are hurt a

little bit, or not. I have confidence in Dr. Crouse and the Protective Association making good their word, and I believe they will do it.

The next thing I wish to dwell upon is the principle involved, or the example set to the young men of the profession by the elders, or so to speak, the officers of our society being cited to the young men as having settled. When the officers run first, the rank and file will be stampeded, and that was done for that purpose, and nothing else. I can see that some of these men have some excuse to offer and really I feel sorry for some of them who have had to offer these excuses. Another thing, the man who was picked out to come and solicit us to settle with the Crown Company, was a former friend of ours; a man who had dined and wined with us, and who was an intimate friend of several of the members that settled. Now how did that man get that position? Naturally, we on the outside would think there was a negro in the fence, and it looks suspicious, and I think the words treason and traitor are not to be apologized for in general, but perhaps in several instances they may have been wrongly applied.

On motion the following resolution was adopted:

Resolved, That we, the members of the New Jersey State Dental Society hereby express and declare our entire trust and confidence to the officers and management of the Dental Protective Association, and that we hereby extend to Dr. J. N. Crouse our full support in his crusade for the rights of our profession, and direct that a copy of this resolution be sent to the different journals for publication.

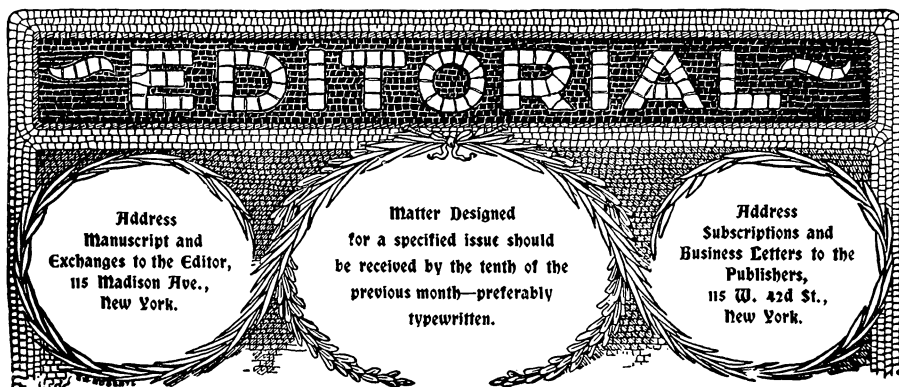
A young man asked here the question whether
Dr. Crouse. the younger members of the profession should join the Association. There is not a young man that comes into the profession who ought not to join the Association, and make it a permanent thing. Just as soon as the Kyle decision was rendered they started out to bring other suits; and they are going to sue on the Richmond bridge. After they have gotten all they can out of the Lowe bridge, they have the Richmond bridge to fall back upon.

I am very glad we have had some of the explanations that have been made here today, especially Dr. Stockton. There was a time when we advertised, and where a man sent his money and asked if we would give him protection, we asked him whether he was a former licensee, because he thereby agreed to recognize the validity of all the patents they owned and that agreement was a hard thing to fight against; the Courts in New York sat down on it; out West we fought them. We know how the Courts rule generally in the different places, and we have had that thing before us ever since the Association was organized.

Now one word more. I wanted this resolution passed, because I wanted to see what journals refused to publish it. Who are the friends of the dental profession today, and who are the enemies, is a question I want to have very distinctly outlined. There are hundreds of agents of supply houses about the country who have gone about slandering the Association and me, and why? They have nothing against me. I don't owe them a dollar, but they don't want to see the dental profession stand together in any organization. When the dental profession comes to learn how much stronger they are in an Association, they will jump into it.

Now what has the Protective Association done besides fighting the Crown Company. We have just won the suit on the Donaldson patent in which the S. S. White Dental Manufacturing Company had collected royalty of from two to three hundred thousand dollars from the profession, and it is fair to presume they would have collected three hundred thousand more if we had not beaten the patent. The Dental Protective Association has forced the price on burs from thirty-six dollars a gross to fifteen dollars. We have stopped the taking out of patents on little foolish devices, little changes on instruments where they have collected royalty for seventeen years, and then make a little change and get another patent, and keep charging the profession royalty so that hundreds of thousands of dollars are taken out of the profession.





Jumping the Bite.

A number of years ago Dr. Talbot, at a meeting of the New York State Dental Society, disputed the possibility of the operation which Dr. Kingsley had denominated "jumping the bite." Dr. Talbot attempted to prove by argument that the results claimed by this method are anatomically impossible, because of the obstacles to be found in the glenoid fossa. At that time, and since, while maintaining that jumping the bite is possible, I have declined to discuss the occurrences in the glenoid fossa. Certain facts recently reported tempt me to depart from this position, and I will therefore express my views, with the declaration that I advance them merely as theories, reserving the right to hold other views should new facts in the future disprove my present ideas.

I held at the time and still consider that there are two fundamental errors in Dr. Talbot's arguments. First, in trying to show clinically that the movement involved in jumping the bite would be impossible, he exhibited the dried bones of a skull, and manipulated the mandible with the condyles in actual contact with the bones of skull, forgetting that in life considerable cartilage intervenes, which makes this articulation much less like a ball and socket joint than as he showed it.

Secondly, in his arguments, he dealt entirely with jaws normally related, and seemed to believe it impossible to jump the bite, because impossible to perform the operation for persons having no deformity. In support of his argument at the meeting he asked persons present to move their lower jaws forward, upon which he claimed they would find certain defects of occlusion. This was true, but these dentists had not mouths in which the operation would have been attempted, and it is for this reason that Dr. Talbot's arguments were faulty. The following are my theories.

**Etiology of
Prognathous
Jaws.**

Let it be distinctly understood that the only prognathous conditions under discussion are those in which the lower jaw is abnormally posed. Cases in which the teeth alone are involved are not here considered.

The human child being usually born edentulous, it is presumable that the conditions in the glenoid region are normal; that is, the relation between the condyles and the fossae is such that should the teeth erupt normally the profile would be symmetrical to the limit of the possibilities for the individual face. This would mean that the chin would be neither receding nor protruding. The exceptions to this rule should produce such deformities at adult age as no dental interference would correct.

Beginning, however, with a child born with normal relations in the glenoid region, may we not have irregular dentition which will operate either to recede or protrude the chin? And if this be so, to leap at our deduction, is it not rational that a correction of the dental abnormality would permit the lower jaw to resume its proper pose? In this view of the matter physical or anatomical obstacles to jumping the bite do not exist. There are three stages to the history. First, the child is born with normally posed jaws. Second, an abnormal pose of the lower jaw is induced by the accidents of dentition. Third, the irregularities of teeth having been corrected, and the glenoid relation being normal, the jaw may be made to assume a normal pose.

To be more specific, let us imagine that the pose of the lower jaw is correct at birth, and even after first dentition, but that during the second dentition a prognathism is developed. It may be of the upper jaw, made more apparent however by the retreat of the lower, the chin now becoming

what we know as receding. Why may it not be that the occlusion is such during this period that the mandible is held back to its most posterior pose, thus producing the recession of the chin? If so, the correction of the occlusion should make it possible for the jaw to assume, or let us say resume, the forward pose. This has been called jumping the bite. The contrary, however, may also be true.

**Jumping
the Bite
Backward.**

At one time I maintained that the bite could not be jumped backward. Since then I have receded from this position, though it is a fact that "jumping the bite" is a phrase coined to fit a definite operation, which was moving the mandible forward. To reverse this and move the jaw backward seems even now possible in only the rarest of instances. Cases recently reported, however, are worthy of attention and study. Dr. Ernest Walker, a reliable recorder of scientific facts, reports a case in the last issue of *ITEMS OF INTEREST*, page 693, where a child developed a prognathous lower jaw and consequent protrusion of the chin under his observation. This case is intrinsically of great value in all discussions of jumping the bite, for first it is a record of jumping the bite forward, without dental aid, even to the point of producing abnormality; thus the impossibility of the operation as argued by Dr. Talbot seems disproven. And secondly, we observe a jaw nearly normally posed moving into an abnormal position, which is probably what occurs when the receding chin is present.

On page 669 of the same issue of *ITEMS OF INTEREST*, Dr. Lukens unintentionally bears testimony to similar conditions. He says he presents "casts of the mouth of a boy nine years of age whose inferior maxilla had been drawn forward and held in mesial occlusion by the superior incisors taking position lingual of normal. It will be noticed by the occlusion of the molars that the mesio-buccal cusp of the superior first molar occludes just one cusp distal of normal. This can be taken as good evidence of the fact that the inferior maxilla has been drawn forward in the glenoid fossa." Curiously enough it is exactly the malocclusion in the molar region which usually determines the fact that the mandible is in a retreated pose. More interesting still, Dr. Lukens in dealing with his case jumped the bite backward. He does not claim to have done this, but his models and photographs are good testimony.

Another case has been partially reported by Dr. Leroy. His case was in many respects unique. The patient protruded his mandible only on one side, this however protruding the chin coincidentally. After treating the occlusion as well as the pose of the chin, the profile was normal. Here undoubtedly was a case, originally normal, the protrusion occurring as described by Dr. Walker.

To sum up in very brief language; where indicated, it is possible to jump the bite, there being no obstacles in the glenoid fossa, the normal pose being possible because the glenoid fossa is normal and consequently ready to receive the mandible in proper pose.

R. OTTOLENGUI.

A Prize to Undergraduates.

The editor of this magazine offers a gold medal for the best plaster models of a case of irregularity, made by an undergraduate student in any dental school in the United States.

The following conditions must be observed: The models must not be varnished, paraffined nor colored in any way; both jaws must be shown and the casts must be properly occluded in such manner that they may be separated for examination. They must be the unaided work of the student, whose assertion of this fact will be accepted on honor.

Models must be delivered, prepaid, addressed to this office not later than March 1, 1901.

In choosing the best models, the following points will be considered: Accuracy of the representations of the teeth; accuracy of the representations of the gums; accuracy of the representations of the roof of the mouth; artistic appearance of the carved parts of the models; artistic appearance of the articulation; accuracy of the occlusion.





Questions will be answered in this department, provided the answers would be of general interest. After publication our readers are cordially invited to make further reply, criticism or comment.

That there is a growing feeling abroad that American dental diplomas are of little value, is only too apparent, judged from current literature, and from private letters. The fact that spurious diploma mills are still permitted to flourish, while in this country the diplomas of even our best institutions are unacceptable to the various states unless the holders submit to additional examination, is the ready excuse for lawmakers abroad, as well as licensing boards, to erect especially stringent rules against Americans. In an examination of an American in France it is reported that the learned examiner asked the candidate "How much human milk would be required to yield a pound of butter?"

**Diploma Mills
Still
Flourish.**

Among the letters from abroad which lie on the editor's desk at the end of vacation is one from Dr. L. C. Bryan, of Basel, Switzerland, in which the following language occurs: "Why have not the Illinois dentists cleaned out their rotten institutions? We will appeal to them from Paris. They need a new state board badly. Germany is burdened with swindle diplomas from Illinois and Wisconsin. We have had meetings there recently to petition the Illinois dentists to do something against the evil. No one seems interested."

On the same subject Dr. Stanley Rea, formerly of the Chicago Dental College, writes from Sydney, Australia, as follows:

"I herewith enclose clippings from the *Sydney Daily Telegraph*. Everything is being done here to put the quack on the same footing as the *bona fide* D. D. S., and as there is not a dental law here these bogus diploma venders reap a harvest. The sooner we get more qualified graduates from the associated colleges the better, as it will serve to educate the public to discriminate between the quack and those who have honestly earned our degrees."

The following are the clippings mentioned:

"A number of Sydney chemists and dentists have recently received an interesting type-written circular, purporting to emanate from the "special Australian representative" of an American institution, which, apparently, is prepared to be lavish in its distribution of dental degrees. The following is a copy of the circular (omitting names and addresses): "Dear Sir.—I have pleasure in informing you that I have been instructed by the faculty of one of the leading medical and dental colleges in the United States, who desire to extend their sphere of usefulness throughout Australasia, to intimate to leading dentists in these colonies that they are prepared to enroll them "ad eundem gradem" in their college as Doctors of Dental Surgery. Should you care to join their roll, kindly notify or call upon me as soon as possible, and oblige, yours faithfully, _____, Special Australian Representative."

"Dentists' diplomas, like most other things, are on sale at a price in the United States."

A correspondent in Germany sends the following crude translation of an article which appeared on July 29 in the *Zahnärzteiche-Rundschau*, of Berlin, which paper he declares is Huxmann's advertising medium:

"The German newspaper, *Daheim*, of Chicago, printed an article about the 'German-American Dental College,' of which we take the following notice: In regard to this institution, which was founded in the year of 1888, it was unanimously resolved by the Illinois State Board of Dental Examiners, that the same should be recognized in the future as well as in the past, as a reputable high school of dentistry by this official body, and that her doctors' diplomas should entitle the owner to practice dentistry in the state of Illinois. The 'German-American Dental College' is the only dental college of America which is *recognized by any State's Dental Commission*.

"Its dean, Dr. F. W. Huxmann, is also its founder and has led the same since 1888, and it was he who out of a very small commencement, has built up an institution of which the Germans of Chicago can be proud.

"As professors and demonstrators in this institution are now engaged:

Dr. Rudolf Mun, Dr. Arthur Weber, Dr. Max Reichmann, Professor Brodr, Dr. Opitz, Dr. August Swierzcerk, and the dean, Dr. Huxmann. To the graduates of this institution, of whom hardly a dozen practice in Chicago and America, belong also some of the most prominent dentists of Europe. In all this institution has about one hundred graduates since 1888 whose numbers, as well as the number of students, would be much larger if this German institution would found a "Rockefeller" among the prominent Germans of Chicago or America who, if only on a smaller scale, would have done for the 'German-American Dental College' what the 'Rockefeller' has done for the Chicago University and helped the leader of this institution over the worst financial difficulties, which do not speed the development of such an institution. It is worthy of recognition that, out of the very small commencing, in spite of the financial difficulties, an institution has developed like the German-American Dental College of today.

"As most of our readers know, the college is situated on North Park Avenue and Center Street, in the immediate neighborhood of the main entrance of Lincoln Park. The lot on which it is built has a frontage of seventy-two feet and a depth of one hundred and twenty-five feet, and the buildings occupy half of the lot. The real college building contains a reception room, as well as a clinic for dental operations (in which daily twenty to thirty patients are treated), a lecture room large enough for one hundred students, technical, chemical and bacteriological laboratories, as well as private rooms for the practice of the superintendent, Dr. Swierzcerk, and the dean, Dr. Huxmann. Next to the college (but all on the seventy-two foot lot), is the boarding house, in which the majority of students live and take their meals. By this it is made possible for the students to live near the field of their labor in one of the nicest parts of Chicago, which would astonish most of the people. The management of the boarding house lays in the hands of Mr. W. Koch and wife, old Chicago people, who are well able to take care of body and soul of the students and their friends. In the evenings often friends of this institution and of the students call, and soon a gay German life, of which especially Dr. Smyser and others, former State Board members, seem to be fond, is in its full blaze, by which much is thought of the beloved ones at home, but also to the new comer's attention is called to the beauties of America's representative Chicago."

**Dr. Wedelstaedt
Defends
His Method.**

Subjoined is a communication from Dr. Wedelstaedt signed "cordially yours, etc." The Doctor takes exception to our report of his paper at Old Point Comfort, using arguments which are not really unanswerable, but he is fond of the last word, and it

is not fair for an editor to take advantage of being an editor, anyway. So the letter is published without further discussion. It reads as follows:

"On page 562, August issue of your journal, is a report of an essay which I read at the last meeting of the National Dental Association. I beg leave to call the attention of your readers to the original essay and to ask of them a careful comparison of the same with your published 'review.' If this review did not do a great injustice to me, to the method to which I called attention, and to those who for some years have been following the same, nothing would have been said. But it does do all these, and, therefore, I enter a good-natured protest. I have just returned from my vacation or this matter would have received earlier attention.

"There was not any reference made in the essay to the 'fracture of the incisive corner.' 'Corner' is a term which I do not use.

"There is no reference made to 'the retaining point made at the incisive corner in this style of cavity was inadequate to withstand the strain (or, perhaps, he said "stress") of mastication.' Reference was made, however, to the difficulty of making and properly filling the anchorage pit toward the incisal in the class of cavities referred to.

"My essay proper was written one year before it was read and I had ample time to think over the reception it was likely to meet from everybody. I was perfectly aware at the time it was written that there were a number of men in our profession who would not encourage any change in the present methods of preparing cavities. I knew also that there were others who would give encouragement and make use of any new preparation to which their attention might be called that would lighten their labors. Had I not known of the welcome reception from this large body of men I should not have called their attention to this new method for preparing distal cavities in upper left cuspids. By following this method it is a pleasure to prepare and fill the most difficult cavity we are called upon to treat. There are many who will give the method to which I called attention a trial; each and all of these will adopt the same for the reason that it so greatly simplifies their work. These men will never again make much use of the old method for they have sufficient ability to recognize the advantages that accrue to those who prepare and fill cavities that are free from the deep and inaccessible retention pits that are a characteristic of the old method of preparing distal cavities in upper left cuspids. These same men will hail with delight a method that allows them to stand erect while preparing the cavity and making the filling. They will also rejoice that attention has been called to this method, for anybody can readily recognize that by following it failure is reduced to a minimum. I have all along been aware of the existence of some who will not entertain the ideas of anybody regarding a change in the old principles and methods that have

for so long been in use. This I cannot help. You know we cannot all think alike. I merely called attention to what I felt would be of use to those who were dissatisfied with the old methods and who, like myself, had sought for a more simple preparation for distal cavities in upper left cuspids."

**Borrowing
Other Men's
Essays.**

In the current issue of the *Dental Cosmos* the editor rightly censures the too frequent publication of the same, or very similar matter. The facts as far as discovered by the *Cosmos* are briefly as follows:

A paper published in the *Cosmos* for June entitled "Dental Jurisprudence" had been read by Dr. DeLancy B. Armstrong before the Union meeting of the Fifth District Dental Society and the Jefferson County Dental Society, both of New York, on April 11th, 1900. It subsequently transpired that the same gentleman had read the same paper before the Jefferson County Society in June, 1896, and that it had been published in *ITEMS OF INTEREST* for February, 1897. Worse yet, attention was called to the fact that a striking similarity exists between this "essay" (?) and passages in Dr. W. F. Rehfuß's work entitled "Dental Jurisprudence," in evidence of which the *Cosmos* offers the "deadly parallel" column.

These are the facts, as far as learned by the *Cosmos*, but there is another tale to this dog worth wagging.

Some months after the appearance of Dr. Armstrong's paper another essay on "Dental Jurisprudence" was read before a society in the far West, and it was forwarded by the society to this magazine for publication. In editing the matter the language seemed strikingly familiar, and at last brought to mind the paper of Dr. Armstrong, with which it was then compared, when it was discovered that the Western writer had taken Dr. Armstrong's paper, using it entire, but interpolating a few views of his own after each paragraph.

The society was notified of these facts in explanation of our not again publishing the article and the matter was permitted to rest. Very shortly after, the editor of this magazine accepted an invitation to read a paper before the Jefferson County Society and visited Watertown, where he was most cordially entertained. Before the public meeting he related the incident of the Western man who had utilized as his own a paper which had emanated from one of their members. The gentlemen present, including Dr. Armstrong, seemed to consider this quite a joke on the Westerner—that is, that he should have been caught borrowing from another man.

A point arises here worthy of being noted, as probably applicable to cases in the past as well as to the one under discussion. When the parallel

column method is used, it is invariably seen that some slight differences in language exist. In this instance the departure from Dr. Rehfuß's language is largely due to the fact that Dr. Armstrong's paper was freely edited in this office before publication, and it was some of the editor's own phrasing which led him to detect the "borrowing" of the Westerner who had adhered strictly to copy.

A more recent instance of this kind should not be allowed to pass without notice. In the July issue of the *Indiana Dental Journal* appeared an article by J. M. Hale, D.D.S., of Mount Vernon, Ind., the major portion of which is a nearly verbatim excerpt from a paper written by Dr. Hart J. Goslee expressly for ITEMS OF INTEREST and published by us in April, 1897. Complaint having been made by the original author, Dr. Hale sends a communication to the *Indiana Journal* (September issue) in which he admits that the "greater part" of his paper should have been credited to Dr. Goslee, and he adds: "It was neglect on my part that it was not credited at the time of publication." Quite so, and the doctor is to be complimented for frankly admitting that he "borrowed," but it would be very much better in the future if he and others who accept invitations from dental societies would write their own papers. It is more just to the society members who expect some fresh ideas, and there is less chance of a lapse of memory in the matter of giving credit, and consequent embarrassment when the facts leak out.

Dr. Robert Wakefield, of New York City, sends us a formula for gold solder, of which he says: "As a gold solder, I have been using the following for a number of years and it gives perfect satisfaction. The following formula gives a solder of great strength, but it requires some skill to handle it properly. Make an alloy as follows:

**Formula
for
Gold Solder.**

4 parts silver C. P.
2 parts copper C. P.
1 1-6 parts zinc C. P.

To make the solder, add one part of the alloy and three parts of coin gold.

**Can Caries
Be
Retarded?**

From Moncton, New Brunswick, Dr. Leverett Somers writes as follows:

"In the February number, 1898, of ITEMS OF INTEREST, your correspondent, Dr. J. Leon Williams, of London, England, in an article on 'Prevention of Caries,' asserts: 'I am, I believe, speaking with all due caution when I say that in my judgment two-thirds of the decay now going on is preventable.'

While that is a most interesting and satisfactory statement, it is based upon personal scientific research of the author of statement, who has repeatedly pointed out to the profession the possibilities of prevention of caries by germicides. Dr. Williams claims excellent results in his own practice by the use of a strong solution of hydronaphthol in oil of cassia.

Dental caries is microbic, and the treatment should be preventive as well as reparative. Is it not a fact that we are working too mechanically with a rapidly increasing microbic disease?

Would you kindly invite your correspondents to give their views regarding the retarding or preventing of dental caries by germicides and the possibilities of good prophylactic treatment in the oral cavity?

The following communication has been received

Alpha-Eucain from Messrs. Schering & Glatz:

and "We notice in the September issue of ITEMS OF
Beta-Eucain. INTEREST Dr. Hans Albrecht's article on "Tropa-

cocaine Injections for Producing Local Anesthesia in Dental Operations," in which the author refers to an old report (1897) by Florke, who had undoubtedly used *Alpha-Eucain*, which we have not recommended for dental purposes since we have introduced Beta-Eucain. We have from time to time sent you reproductions of the literature we have found in medical and dental journals, and such authorities as Professors Reeclus, of Paris; Arthur E. Barker, London; H. Braun, Leipzig; and Willy Meyer, of New York, have spoken highly of Beta-Eucain.

Dr. Albrecht also states that, in spite of all controversy, it has not as yet been possible to prevent the subsequent swelling of the cheek. As this occurs in comparatively few cases, it is questionable if the drug is responsible for it. We have only this morning received a letter from a dentist, in which he says that he does not know how he could get along without Beta-Eucain and he finds it the most effective preparation he has ever used for extracting teeth.

As far as we can judge, tropa-cocain is very little spoken of in the current literature, and it certainly possesses no advantages over Beta-Eucain, which is also much cheaper in price."

Errors We regret that some errors should have occurred
Corrected. in the article by Dr. Herbert A. Pullen, published in our September issue. On page 678, the reference

Figs. 3 and 5 should have read Figs. 2 and 4. In the twelfth line on page 678, the word "rear" should have been "bunches." Paragraph two on page 678 is misplaced. It should have followed second paragraph on page 679.

**Patent
Bill
Endorsed.**

By unanimous vote, the Maine State Dental Society, at its annual meeting in July, passed the following resolution: "It is the sense of this body that the patent bill now before Congress as Senate Bill No. 269 and House Bill No. 7017, should be passed in the interest of the dental profession.



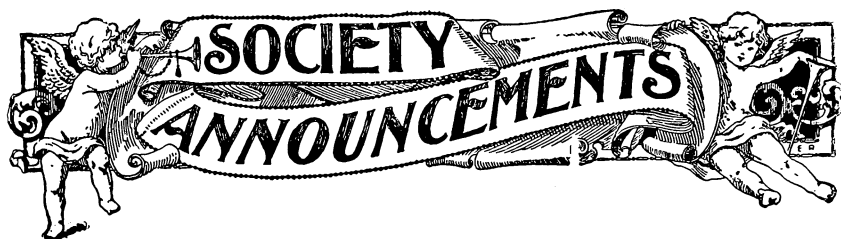
John D. Huntington.

Dr. John D. Huntington, after an illness of many months, and after a life of intense activity and immeasurable usefulness, died on September 15th, 1900, at his home in Watertown, N. Y.

He was a native of the town of Watertown, and had been a resident of the city for over fifty years, during forty of which he practiced dentistry in the same place. Ever ready to adopt new ideas, he kept himself well abreast of the times and never grew old.

The story of Dr. Huntington's life is an interesting one. He was born in the town of Watertown, February 11th, 1827, and remained in that place until 1835, when his parents removed to Ohio, in which place they only remained for three years, going to Caldwell county, Mo., in 1838, then the extreme western frontier of civilization. In 1840 they returned to the east side of the Mississippi river and located at a place called Commerce, fifty miles north of Quincy, Ill. Having lost both of his parents, he returned to his native place in the fall of 1848, and located there permanently, and took up the profession of dentistry in 1861. In his early life he was an expert engraver, telegraph operator, and printer. He originated the first daily newspaper published in Watertown. When Dr. Huntington retired about a year ago he was the oldest practicing dentist in northern New York, and was widely known for the excellence of his work.

He was for many years a member of the First Presbyterian Church, and his life and character were consistent with the highest standard of Christian faith.



Union Meeting of the Seventh and Eighth District Dental Societies of the State of New York.

The thirty-second annual union meeting of the Seventh and Eighth District Societies will be held in Buffalo, Tuesday, Wednesday, and Thursday, October 30th, 31st, and November 1st, 1900. These two districts comprise sixteen counties and a large attendance is expected. An interesting programme is being arranged by the Business Committee, with clinics and demonstrations as a special feature.

S. E. MACDOUGALL, Secretary.

The American Dental Society of Europe.

At the twenty-seventh annual meeting of the American Dental Society of Europe, held in Paris, August 7, 1900, the following officers were elected for the ensuing year: President, Dr. W. Mitchell, London; Vice-President, Dr. S. S. Macfarlane, Frankfort-on-Main; Hon. Treasurer, Dr. L. J. Mitchell, London; Hon. Secretary, Dr. W. E. Royce, Tunbridge Wells.

Executive Committee: Dr. L. J. Mitchell, Dr. E. Lawley-York, Dr. J. H. Spaulding, Dr. L. C. Bryan, Dr. W. S. Davenport, Dr. W. L. Croll. Ex-Officio Members: Dr. W. Mitchell, Chairman; Dr. W. E. Royce, Hon. Secretary.

Membership Committee: Dr. C. J. Monk, Dr. G. Cunningham, Dr. W. L. Croll. Ex-Officio Members: Dr. S. S. Macfarlane, Chairman; Dr. W. E. Royce, Hon. Secretary.

WALDO E. ROYCE, Hon. Secretary.

2, Lonsdale Gardens, Tunbridge Wells, England.

New Hampshire Dental Society.

The annual meeting of the New Hampshire Dental Society will be held at the Manchester House, Manchester, N. H., November 6 and 7, 1900. All members of the profession are cordially invited to attend.

FRED F. FISHER, Secretary.

913 Elm street, Manchester, N. H.

Fifth District Dental Society of the State of New York.

The thirty-second annual meeting of the Fifth District Dental Society will be held at Syracuse, October 9 and 10. Dr. S. E. MacDougal, of Buffalo; Dr. F. H. Lee, of Auburn, and other prominent members of the profession, will present interesting papers and clinics. Plan to attend all sessions both days.

R. B. REDWAY, Secretary.

Ilion, N. Y.

Dental Commissioners of Connecticut.

The Dental Commissioners of Connecticut will meet at the Capitol in Hartford, Tuesday, Wednesday, and Thursday, November 13, 14, and 15, 1900, to examine candidates for license and attend to any business proper to come before them.

The written theoretic examination Tuesday and Wednesday, November 13th and 14th.

Practical examination in operative and prosthetic dentistry at 9 o'clock, Thursday, November 15th.

All persons desiring to practice dentistry in this state must apply to the Recorder for *revised rules* and for the proper blanks. Blanks must be carefully filled in and sworn to and with the fee, twenty-five dollars (\$25.00), filed with the Recorder at least one week before the day of examination.

GEO. L. PARMELE, M.D., D.M.D.

Dental Commissioner and Recorder.

Northeastern Dental Association.

The sixth annual meeting of the Northeastern Dental Association is to be held at the "Eloise," in the City of Providence, R. I., October 16, 17 and 18, 1900. The committee has secured the most desirable and commodious building for the meeting ever obtained for such a purpose, and strenuous efforts are being made, with the most gratifying results thus far, to make this meeting the best in every way ever held, at least in New England. Prominent men of the profession have been secured for papers and clinics. The exhibits will be large, and so separated from the scientific portion of the meeting, that neither will disturb the other. It is earnestly hoped that a large attendance will be present at all the sessions.

EDGAR O. KINSMAN, Secretary.

15 Brattle Square, Cambridge, Mass.

Illinois State Board of Dental Examiners.

The next regular meeting of the Illinois State Board of Dental Examiners will be held in Chicago, October 5 and 6.

Those desiring to take the examination should notify the secretary ten days before date of meeting.

J. H. SMYSER, Secretary.

70 State street, Chicago, Ill.

California State Dental Association.

At the annual meeting of the California State Dental Association held in June, the following officers were elected for the ensuing year: President, A. F. Merriman, Jr., Oakland; First Vice-President, A. M. Barker, San Jose; Second Vice-President, Frank L. Platt, San Francisco; Third Vice-President, L. Van Order, San Francisco; Secretary, W. Z. King, San Francisco; Corresponding Secretary, W. J. Taylor, Sacramento; Treasurer, Thos. N. Inglehart, San Francisco.

Next annual meeting at Los Angeles, July 9, 1901.

W. Z. KING, Secretary.

1170 Market street, San Francisco.

Manila Dental Society.

The Manila Dental Society was organized February 4, 1900, and meets on the second Monday of each month at eight p. m. Legal practitioners in the Philippine Islands are eligible to membership. Resident physicians and visiting dentists are always cordially welcome.

The officers for 1900-1901 are: President, Frank R. Harkinson; Vice-President, Juan Arevalo; Secretary, Lloyd R. Hawley; Treasurer, R. L. Hale.

Programme of papers for various meetings is as follows: October 8, paper by Dr. R. L. Hale, "Gold Filling;" November 12, paper by Dr. E. B. Merchant, "Crown and Bridge Work;" December 10, paper by Dr. Juan Arevalo, "History of Dentistry in the Philippines;" January 14, paper by Dr. Anna M. Sawyer, "Amalgam Filling;" February 11, annual address by the president, Dr. Frank R. Harkinson. Annual meeting. Election of officers, reports, etc.

LLOYD R. HAWLEY, Secretary.

Freedom Building, Manila, Philippine Islands.

Massachusetts Board of Registration in Dentistry.

There will be a meeting of the Massachusetts Board of Registration in Dentistry, in Boston, November 14th, 1900, for the examination of candidates. All applications must be filed with the Secretary before November 7th.

Application blanks and any further information can be obtained from the Secretary, G. E. Mitchell, D.D.S., 25 Merrimack street, Haverhill, Mass.

The Mississippi Valley Medical Association.

The next annual meeting of the Mississippi Valley Medical Association will be held at Asheville, N. C., October 9th, 10th, and 11th, 1900.

A long and interesting program has been prepared. All members of the medical profession are cordially invited to attend.

HENRY E. TULEY, Secretary.